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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

FIBROUS TUMOUR OF THE THIGH.

Under the care of T. TATUM, Esq.

We had an opportunity, a few days ago, of seeing a very interesting operation for the removal of a large tumour situated at the back of the thigh, which was of such great interest, both pathologically and surgically, that it deserves insertion, although the unfortunate event of the case rendered it less instructive than it would have been had the patient survived. The patient was a boy, 14 years of age, William C., an agricultural labourer, of very healthy appearance, and who had always enjoyed sound health. The tumour had been noticed about three years, and was slowly growing. It had attained an enormous size on admission, reaching from a short distance below the trochanter down to within about three inches of the popliteal space, and measuring more than six inches in length. It was also of considerable thickness, and had made the parts so tense that it was difficult to judge of its connexions. On relaxing the muscles, which were prominent and tense below, it became much more moveable, and appeared as if unconnected with the bone. Its structure was hard, and the surface smooth. There was no interference with the functions of the limb. Various opinions were entertained, both as to the nature of the tumour, and the proper course to be adopted in its treatment. On the former head, the comparatively slow growth of the tumour, and the perfect health of the patient, appeared to negative the supposition of malignant disease. The tumour seemed too moveable to be growing from the bone; its large size, and the want of any symptoms of paralysis or disordered innervation, were against the idea of its being a neuroma of the sciatic nerve; its smooth surface was not very like the lobulated outline of an enchondroma. On the whole, it was taken to be an innocent tumour, probably of the fibrous or fibroplastic nature, and not growing from the femur.

As to the treatment, it appeared evidently necessary to remove it, since its size already prevented the free use of the limb; the veins over it were beginning to enlarge; and it seemed clear that, in a short time, it must ulcerate, and thus cause the patient's death. Whether, however, it would be possible to dissect it out, or whether is would be necessary to resort to amputation, was a difficult problem to solve. The great size of the tumour, and its situation close upon, if not surrounding, the great sciatic nerve, rendered it doubtless very hazardous to attempt to dissect it out; still the cruelty of sacrificing the whole limb in so young a subject (for the close approximation of the tumour to the top of the thigh would have rendered it necessary to amputate at or just below the hip-joint) determined Mr. Tatum to cut down on the tumour, and, if it were found innocent, to do his best to remove it. This was accordingly done. The posterior surface of the tumour having been exposed, the sciatic nerve was found imbedded in it, and the muscles stretched over it. A small piece of the morbid growth was cut out, and found to be of the ordinary fibrous character. The removal of the growth was now resolved on. The first thing was to secure the integrity of the sciatic nerve. Six inches in length of this large nerve was deeply inclosed in a wide groove on the back of the tumour. It was dissected out with care, and apparently without any injury to its sheath. The muscles were then dissected off the tumour, and the soft parts separated from it down to the femur. The tumour dipped down to the periosteum, but seemed to have no organic connexion with it. The size of the growth was so great that it was impossible to get it out entire without injuring the nerve; so that Mr. Tatum was obliged to slice it up, and remove it in pieces. It hardly yielded a drop of blood when divided. Five successive portions were removed, and thus the whole growth seemed to be taken away. The operation was necessarily protracted, and a good deal of blood was lost, but not a very large quantity. The boy was kept under the influence of chloroform during the whole period. He never fairly recovered, and died on the fourth day after the operation; gangrene having made its appearance in the edges of the wound, and in the skin of the upper part of the calf of the leg.

The *post mortem* examination revealed nothing remarkable, except that the firm contraction of the heart, and the fact of all its cavities being filled with firm clot, appeared inconsistent with death from hæmorrhage. Numerous portions of the tumour were examined, and found to consist of fibrous tissue only.

The exhaustion of so protracted an operation, the great loss of blood necessarily occasioned in exposing such a vast surface, the isolation of so large a portion of the principal nerve, and perhaps the depressing effect of the prolonged exhibition of chloroform, were probably the causes of the gangrene. It is to be regretted that the case turned out so badly; still there can be little doubt that the course adopted was perfectly justifiable; and the bold and dexterous attempt which was made to preserve the limb deserved, and would probably on another occasion have met with, better success.

ROYAL FREE HOSPITAL.

HYPERTROPHY OF THE CLITORIS, WITH CONDYLOMATA.

Under the care of V. DE MÉRIC, Esq.

[*From Notes by* N. HALL, Esq., *House-Surgeon.*]

We subjoin notes of one of the most extensive cases of this disgusting ailment which we have seen lately; one in which the new growths were so extensive as to constitute a really formidable malady, and which it would have been difficult to attack by any less severe measure than the one adopted by Mr. De Méric. In fact, the inefficiency of the methods usually adopted (by saturnine applications, caustics, etc.), in many cases, is well known; and now that the universal use of chloroform has diminished the unwillingness of surgeons to resort to such painful methods of cure, it has caused a much more free recourse to the knife than used to be the practice some years ago. It has seemed to us, however, to be of little use to remove the vegetations, unless that be done entirely, and the tissue from which they are growing be freely destroyed. The hæmorrhage is generally copious, although not alarming. In France it has, we believe, become very usual to make use of the *écraseur* for the performance of these operations on the clitoris and labia; and they are of the class of cases where this instrument may be used safely, and with tolerable certainty of avoiding hæmorrhage; but, as some caustic must afterwards be used to avoid the reproduction of the morbid growth, and this process is certain to easily check the hæmorrhage, there is no particular motive for avoiding the use of the knife. As to the precise caustic to be used, it is probably a matter of no great moment. In two cases recently under Mr. Cutler's care at St. George's Hospital, we have seen the actual cautery used, and with very good effect; and perhaps this agent is the most rapid and powerful; and it has, besides, the additional advantage, that its action is at once limited to the parts touched—an object which is more difficult to effect with deliquescent caustics. There are few cases in which the great advantage of chloroform is more strikingly shown than in the treatment of this troublesome and obstinate disease.

Elizabeth G., aged 22, was admitted on February 28th, 1859,

under the care of Mr. De Méric, on account of hypertrophy of the clitoris, and enlargement of the left labium, with a large crop of vegetations. The clitoris was of the size of a hen's egg. There were little scars of chickenpock about the thighs and legs.

History. She had been on the town eighteen months. She was born in Kent. She had been in service in the country, and at that time there was no hypertrophy. Six months ago, she had a discharge, with a small sore about the fourchette. There were indolent enlarged inguinal glands. She was treated with pills, mixture, and lotion; and got well for a few days, but the tumour used to enlarge or diminish in proportion as she had more or less sexual intercourse. The hypertrophy of the clitoris and enlargement of the labium went on very rapidly: in fact, they reached their present size in about six weeks, from a comparatively ordinary bulk. She had not had intercourse for the last three months. She used to be pretty cleanly in her habits.

The treatment was merely palliative, until the removal of the hypertrophied parts was undertaken, on March 21st. The peduncles of the hypertrophied clitoris were tied close to the pubis separately, a kind of arch being formed by them. It is probable that the pillars of the arch were the continuation of the prepuce of the clitoris. The latter was then removed by the knife; and the same treatment was used, beginning from below, to remove the warts with a portion of the cellular tissue of the labium. The hæmorrhage was considerable; but no vessels were tied, as compression sufficed. In passing the finger into the vagina, a kind of polypoid growth was felt, of the length and thickness of the first phalanx of the index finger: this was tied at its juncture with the mucous membrane of the vagina, and allowed to slough away. When the hæmorrhage had been controlled with cold water, the part was freely brushed with potassa fusa, especially between the labium and thigh, where the scissors could not play well.

March 24rd. The patient had a severe fit of fainting. Wine and ammonia revived her.

March 25th. There had been but little hæmorrhage, which was arrested with cold water. She had had warm water dressing. She was now in pretty good condition. The parts were suppurating nicely.

After this, we are informed that the case did well, and the exposed surface healed kindly.

ST. MARY'S HOSPITAL.

CASE IN WHICH THE PENDULUM OF A CLOCK WAS IMPACTED IN THE RIGHT EAR.

Under the care of J. Toynbee, Esq.

[Mr. Lawrence, *House-Surgeon.*]

Ferdinand H., aged 35, was brought to St. Mary's Hospital on March 4th, 1859, with a pendulum of a clock projecting from the right ear. He stated that he was a clock-maker; and that, while walking in the street, about half an hour previously, and picking the ear with the hook end of the pendulum of a clock, a drunken man passing by, with a basket upon his head, reeled against him with considerable violence, and forced the pendulum into the ear, bending it to a right angle. Upon endeavouring to withdraw the pendulum, he found it so firmly impacted that it resisted all his efforts; and he was brought to the hospital by a policeman, and admitted under Mr. Toynbee's care.

Upon examination at the time of his admission, by Mr. Lawrence, the pendulum was found to be inclined inwards and rather forwards. Upon attempting to withdraw it, considerable force was required; and, when it was withdrawn, a crack was felt, as if some bone had been chipped. Upon examining the extremity of the pendulum, the cause of the difficulty in its removal was found to be the presence of a hook, which was not only turned back, but the extremity was again turned outwards. After the withdrawal of the hook, there was a slight oozing of blood for about five minutes. The patient stated that he suffered great pain when the hook was thrust into the ear; this was followed by a sensation of hammering in the organ, which was succeeded in a few minutes by the sound of bells ringing very violently. Whenever the pendulum was moved, the pain, hammering, and sound of bells ringing, returned. Although the pain was very severe at the time of the removal of the hook, it quite disappeared on its withdrawal, and it did not recur. The hearing of the left ear was greatly diminished while the pendulum was in the right. He was ordered purgatives and lead lotion.

March 5th. He complained of a constant humming in the right ear, and of a sound as if water were falling from a height; he also had a slight headache. The hearing power of the left ear was natural: the watch, however, could not be heard with the right ear, but the crack of the nail was distinguished. The meatus was so swollen that the parietes were nearly in contact. A blister was ordered to be applied behind the ear.

The patient gradually improved; a slight discharge took place, and the tumefaction of the meatus diminished. The watch was heard at a distance of about two inches.

March 14th. Mr. Toynbee removed a considerable quantity of epidermis from the surface of the meatus; and the membrana tympani became visible. Its surface was red; and the dermoid layer was so thick that the malleus could not be distinguished. A lead lotion was ordered to be applied on cotton to the orifice of the meatus; and the blister to be continued.

March 17th. The upper part of the membrana tympani was still very red and much tumefied; and, although no orifice could be detected in it, still, when the patient blew the air forcibly through the Eustachian tube, it was heard to rush into the meatus through the membrana tympani.

Mr. Toynbee remarked, that most probably the round end of the hook had been forcibly struck against the upper part of the membrana tympani, possibly separating it from the bone, and driving it inwards; and he added, that the occurrence of this accident might offer some explanation of the manner in which the handle of the malleus could be fractured—a lesion which had taken place in a preparation that he had recently dissected.

The patient did not return to the hospital.

Original Communications.

ON A NEW MODE OF RELIEVING RETENTION OF URINE.

By Langston Parker, Esq., Surgeon to the Queen's Hospital, Birmingham.

Within the last few days I have succeeded, in two separate instances, in relieving retention of urine in the following manner.

A gentleman lately entered my consultation-room in great pain from retention of urine. He had not passed water for many hours; the bladder was much distended. He stated that ineffectual efforts had been made to pass a catheter, during which operations he had lost a considerable quantity of blood. I attempted to relieve him by the catheter, but failed to do so; I tried instruments of various sizes and various curves, but could not succeed in passing one into the bladder. I then took a No. 2 wax bougie, and inserted a small portion of potassa fusa into the end of it, after the manner proposed by Mr. Whateley, and practised by Mr. Wade in the treatment of permanent stricture of the urethra. I well moulded the wax over all but the extreme point of the caustic, and passed it rapidly down to the point of obstruction: by pressing against this for a short time, it yielded, and I had the satisfaction of finding the bougie easily enter the bladder. I directed the patient to strain as I withdrew the instrument: a stream of urine followed, and the bladder was emptied. The retention did not again occur, and very little irritation accompanied or followed the proceeding. On the next day, the patient made water freely, but in a small stream.

The second case was very similar. The patient had travelled some distance by rail. The bladder was much distended, the symptoms urgent, and a catheter could not be made to enter the bladder. A small wax bougie was armed as in the last case, passed down to the stricture, and firmly pressed against it. It yielded very shortly; the instrument entered the bladder, and a stream of urine followed its withdrawal. This patient had a second attack of retention two days afterwards, which was completely relieved in the same manner.

A modification of this plan might be attempted by inserting a small piece of potassa fusa into the extreme point of a small gum-elastic catheter, and using it without the stilette. I am sanguine enough to hope that many cases of retention of urine might be easily and quickly relieved by the simple means I have suggested, and more formidable and dangerous operations thus frequently avoided.

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THE USES OF BLEEDING IN INFLAMMATION AND OTHER DISEASES.

By JOHN HUGHES BENNETT, M.D., F.R.S.E., Professor of the Institutes of Medicine, and of Clinical Medicine, in the University of Edinburgh.

THE admirable paper read by Dr. Markham to the Medico-Chirurgical Society of London, and inserted in two recent numbers of this JOURNAL (April 9th and 16th), appears to me deserving of special notice. I have little doubt that he has correctly stated what ought to constitute one of the indications for bleeding in diseases.

Twenty years ago, it was supposed that the primary cause of inflammations was an increased action of the vessels, but more especially of the arteries, which sent forwards or determined to the parts a greater amount of blood than the veins could carry away. As a result, the smaller vessels became blocked up and distended, while the fluid part or lymph was squeezed through their walls, and infiltrated into the surrounding tissues. The remedy for this was the removal of blood from the part, either by local or general bleeding, by which it was thought this condition could be at once removed. But it is now understood that not only is this theory wrong, but facts have shown that the practice which flows from it is not effective. Instead of the morbid action beginning in the vessels, it truly begins in the tissues outside the vessels. These, in health, are continually attracting and selecting from the blood such of its constituents as are necessary for their own nourishment. Thus the cells of the liver select what is necessary to form bile; the salivary glands what is necessary to form saliva; the muscles what is required to form muscle; and bone what is wanted to form bone. If these parts are injured, healthy nutrition does not take place; but instead of it there is attracted from the blood that lymph, or fluid part of the blood, which is so essential a feature in all inflammation. Instead of being pushed out by a *vis a tergo*, it is drawn out by a *vis a fronte*—the active force causing the disturbance is not in the vessel or in the blood, but in the cells and tissues to which these are distributed.

Again, when the living fluid part of the blood has in this way got outside the vessel, a wonderful new growth of cells takes place in it, whereby what is unnecessary is removed by absorption and excretion, and what is required is developed into new texture. This stage of the process is accompanied by more or less excitement; an increased flow of blood is drawn to the part; more nourishment is required, and nature supplies it. In the same manner that when the leaves bud in spring, more sap exists in and is drawn from the vessels in plants; that during the annual growth of the stag's horn, all the vessels in the neighbourhood are turgid with blood; that when new teeth appear in the infant, the gums are red and tender; that when, in short, all active processes of local growth are proceeding, the pulse is strong, the blood flows with increased velocity, and the neighbouring tissues are congested; so, for the wisest and best purposes, does nature set up a similar action in inflammation, and turns to use that exudation which has been poured out, by transforming it into cells.

According to this theory, we must look upon such excitement in the neighbourhood of an inflamed part as salutary, whereas formerly it was regarded with apprehension. The increased force of the pulse was thought dangerous, and the rapid flow of blood which used to be looked upon as injurious to the individual we now regard as necessary for a cure. Instead, therefore, of diminishing or lessening these useful changes by blood-letting and antiphlogistics, it is clear that theoretically they ought to be left undisturbed, and even supported when necessary. The correctness of this theory has been proved by actual experiment and experience on a large scale, a marked improvement in the recovery from severe inflammations having everywhere resulted from abandoning a lowering treatment in that class of diseases. Inflammations of the lungs, of the pericardium, of the pleura, and so on, have been proved not only to be much less fatal, but to get well in a much shorter time, since bleeding and antiphlogistics were replaced by nutrients and stimulants.

But this is not saying that blood-letting can never be useful in diseases, and may not occasionally be beneficial even in inflammations. Though it has been industriously circulated that I am opposed to bleeding under all circumstances; so far is this from being the case, that I have carefully maintained the contrary. Thus, in my original paper in the *Edinburgh Monthly Journal* for February 1857, pp. 782-3, I observe:—"But whilst large and repeated bleedings, practised with a view of arresting the disease, appear to me opposed to a correct pathology, small and moderate bleedings, directed to palliate certain symptoms, and especially excessive pain and dyspnœa, may reasonably be had recourse to, and unless there be great weakness, without any fear of doing injury. I have often been struck, especially in cases where large thoracic aneurisms cause these symptoms, with the small loss of blood which will occasion marked relief. The same result may be hoped for in other cases where the congestion is passive, even when that is associated with active repletion of blood, followed by exudation. But I need scarcely remark, that this mere palliative object of blood-letting is not the ground on which the practice has hitherto been based, and that in this point of view it requires to be very differently explained." Again, at page 795, I say:—"There are cases, which were formerly mistaken for inflammation, in which blood letting may still be useful. I allude to those where an obstruction to the circulation exists in the heart and lung, *dependent on over-distension of the right side of the former organ*, and cases of venous congestion, engorgement, and perhaps œdema of the latter; also, certain cases of bronchitis preventing aëration, of aneurisms, and of asphyxia. Although even here the true value of the remedy has yet to be positively ascertained, the special cases demanding it more carefully discriminated, and the mechanical principles which justify the practice determined." These same passages are given *verbatim* in the second and third editions of my *Clinical Lectures on the Principles and Practice of Medicine*.

It follows that, in the very class of cases in which Dr. Markham says he has bled with advantage, I have always maintained the utility of employing general blood-letting with moderation. So with topical blood-letting, wherever it can directly operate on the inflamed or congested part, it may be beneficial, as in certain external inflammations, conjunctivitis, or hæmorrhoids; but in deep-seated internal inflammations it can be of little benefit. This is a widely different method of employing the remedy from what was formerly practised; viz., by repeated large bleedings, which lowered the pulse and exhausted the patient, at a time when he required all his strength and vigour to support the new changes in growth required by the economy. I believe that an equally good effect would have resulted in some of Dr. Markham's cases, from the extraction of one-half or even one-fourth of the amount of blood he took away. So far, however, is the proper use of blood-letting as a palliative in inflammation, and as a curative measure in congestion of the heart, asphyxia, and so on, opposed to pathology, that it is quite in harmony with it; and, in all these cases, its good effects fully explain the benefits, temporary and permanent, which have been recorded in its favour by practitioners both ancient and modern.

ON THE CAUSES OF PULMONARY CONSUMPTION.

By JAMES TURNBULL, M.D., Physician to the Liverpool Royal Infirmary.

[*Concluded from page* 367.]

Occupations producing Inhalation of Irritating Particles. There are many occupations, which, it can be shown, have a direct tendency to cause chronic pulmonary disease by the local irritation they produce on the lungs, in addition to the injurious effect which is often, at the same time, caused by the sedentary nature of the employment itself. It has long been known that stone masons, who are engaged in cutting stones, suffer from inhalation of the silicious particles, and become affected with pulmonary disease; and also that the grinders employed in manufacturing cutlery suffer in a similar way, especially when the processes are carried on in confined workshops, and without the aid of water, which prevents the diffusion of the silicious and metallic particles in the atmosphere. Under the head of metal manufacture, Dr. Greenhow has given some statistics which prove very clearly the injurious influence of such employments; and, in respect to the operatives of Sheffield and Birmingham, it is made apparent by the great divergence of the pulmonary death-rates in the male and female population. The men, being almost exclusively engaged in such employments, suffer most; and in Sheffield we find that the male pulmonary death-rate is 839, whilst the female is only 670; and in

Birmingham the male rate 838, and the female 699. The coarser kinds of metal manufacture, such as ironfounding and nail making, seem to be much less injurious.

Dr. J. C. Hall, of Sheffield, has given a very good account, in the volume of this JOURNAL for 1857, of a peculiar form of chronic inflammation of the lungs, to which the grinders are subject.

It has been found that the linen and flax manufacture produces an injurious effect on the operatives, by causing them to inhale an atmosphere charged with dust. I have myself observed the tendency of dust to cause consumption in the corn-porters and warehousemen of Liverpool, whose employments are of a dusty nature. It can be shewn by a comparison of the male and female pulmonary death-rates of Hendon, an agricultural district between London and Harrow, where the men are chiefly employed in binding and cutting hay for the London market, that the inhalation of the dusty particles must have a pernicious influence on the lungs; for whilst in most of the purely agricultural districts the female is at least as high as the male death-rate, in Hendon we find that the male exceeds the female rate in the proportion of 434 to 372.

Mining. Lead-mining is a kind of employment which appears to have a very distinct and decided effect in the production of pulmonary disease. Tin and copper-mining produce a similar though less pernicious influence. The injurious effects of these employments fall chiefly, or almost exclusively, on the men; so that a comparison of the male and female death-rates of some of the districts gives us an accurate mode of estimating their respective influences. In all the lead-mining districts, the male death-rate from pulmonary diseases greatly exceeds the female; and in Alston, which is the most exclusively lead-mining district in the kingdom, the male death-rate is 877, whilst the female is 494. The injurious effect of the occupation on the men is such, that a larger annual proportion of the grown-up men die of disorders of the chest than in the most unhealthy towns in the kingdom; and in consequence, Alston has been found to be the place in which there is a larger proportion of widows than in any other in the kingdom.

The injurious effect of copper-mining is shewn in the fact of the male pulmonary death-rate of Redruth being 670, whilst the female is 450; and the injurious influence of tin-mining in the male rate of Penzance being 560, whilst the female rate is 456. It would appear that whilst lead, copper, and tin-mining, are certainly dangerous to health, coal-mining is at least not unhealthy, so that we have reason to suppose that there must be metallic particles inhaled during the working of the ores, which injure the lungs.

M. Lombard (*Report on the Laws and Ordonnances in force in France for the Regulation of Noxious Trades and Occupations*) found that in 1000 deaths from consumption, the occupations were as follows:—

With vegetable and mineral emanations	176
With various dusts	145
With sedentary life	140
With workshop life	138
With hot and dry air	127
With stooping posture	122
With sudden movements of arms	116
With muscular exercise and active life	89
With exercise of the voice	75
Living in the open air	73
With animal emanations	60
With watery vapour	53

Soldier's Life in Barracks. There is no occupation which can be shown to have so direct and powerful an influence in producing consumption as the life of a soldier. Though they are men picked out as the soundest and healthiest, it has been found that the mortality among soldiers is extremely high, being in the infantry of the line 18·7 per 1000 from all causes, or double that of the general population of the whole country, which is only 9·2. This applies to the army at home, and does not include the officers, who are not affected in a corresponding ratio. In the foot guards, the mortality is even higher, being 20·4 per 1000. Not only, however, do we find that the mortality among soldiers is far greater than in any other class of the community, but we also discover on further examination that there is scarcely any fact in reference to pulmonary diseases, more striking, more important, or more clearly proved, than this, that the excessive mortality is caused more by the development of pulmonary than any other class of diseases. The form of disease to which an impulse is thus given is almost entirely chronic, and of tubercular nature. Dr. Farr has pointed out, with the aid of a diagram, that whilst in the male population of England of the soldier's age, only 4·5 die of chest and tubercular diseases; in the infantry of the line, there are no fewer than 10·1. The deaths in the general population from all diseases being only 9·7. We see, therefore, that in the army, a greater number perish from pulmonary diseases alone. In the guards, the proportion is even higher, being 12·5 from consumption and allied chronic affections, exclusive of the acute.

The facts and statistics brought to light by the commissioners have further proved that the higher the mortality of each particular branch of the service, the greater is the proportion of pulmonary disease; and also, that the ratio of deaths from consumption to the deaths from other pulmonary diseases, increases in proportion as this class of diseases is more prevalent; so that if it were wished to make a great experiment to discover the causes of consumption by its actual production, it would be difficult to devise a more complete one than has been made by the neglect of the health of soldiers in barracks. For it is not in the field that the great mortality from pulmonary disease occurs, but while the soldier is at home; and it is therefore in his mode of life that we must look for a solution of the causes of his great liability to consumption.

The soldier's life is monotonous, and he is under restraint, to which circumstance we may attribute some influence; but in these respects he is not materially different from the sailor in the navy on the home station, in whom the mortality is only at the rate of 6·8 per 1000, or considerably less than that of the general population. Neither can night duty, which has been assigned as one of the causes, have any great effect; for the mortality in the police force, who have a larger amount of night duty, does not exceed that of the population of the country.

The intemperate and debauched habits of soldiers undoubtedly have a very considerable influence; but we must look beyond all these; and there is reason to believe that want of proper exercise and suitable employment are quite as efficient causes; but that crowding and insufficient ventilation of the barracks, and defective sewerage, are the most important.

The mortality is least in the cavalry and dragoon guards, who have varied exercise in the stable, as well as the sword exercise, which calls into action the muscles of the chest in a manner unknown to the foot soldier, whose attitudes are monotonous and restrained; so that when on duty and drill, he is often loaded with knapsack and other accoutrements, which constrain and hinder the free action of the muscles of the chest, and seem to act injuriously on the respiratory organs.

The commissioners appear, however, to think that of all the causes the most important in the production of the excessive amount of consumption in the army, has been the confined ill ventilated condition of the barracks. They seem to think that the breathing of the unwholesome air of the crowded dormitories has laid the seeds of consumption—the minimum cubic space allowed to each soldier having been only 450 cubic feet. We have reason, therefore, from this and other facts to believe, that when impure air is habitually respired, it acts like a blight upon the lungs. Some influence may also be attributed to the monotonous and unvaried nature of the soldiers' diet, and to the meat being always cooked by boiling.

It is sad to think that such an amount of disease and mortality should in time past have been allowed to occur amongst our soldiers from neglect of ordinary sanitary laws. But the attention of the country has been fully roused by the facts published in the Report of the Army Commissioners: and we may now hope that what was done towards the end of last century for our sailors, by sanitary improvements in respect to diet, the use of lemon juice, ventilation, cleanliness, and the preservation of the water in iron tanks—measures by which scurvy, fever, and dysentery, were almost extinguished, and the mortality reduced below the level of that of the general population—will be shortly effected for our soldiers, by the introduction of such changes as may reduce the disgraceful pulmonary mortality to a level with that of the general population of the country.

Confinement. It is a well-known fact that many of the lower animals, when confined in menageries and deprived of proper exercise, light, and fresh air, become subject to consumption and frequently die of tubercular disease. Dr. Baly has demonstrated that the same influences operate on man; and that, in prisons, though the food, ventilation, and other hygienic conditions are unexceptionable, the proportion of scrofula and consumption in criminals is remarkably increased, and that the

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rate of mortality from these diseases augments with the extension of the period of confinement. In the Millbank Prison he has shown that the mortality is double that of the metropolis, and that the deaths from consumption are three times as numerous. We have seen that soldiers suffer from the constrained life they lead in barracks, and there can be no doubt that various other constrained modes of living, as, for example, in workhouses, have a similar effect. I have seen the same injurious effect exemplified in the development of consumption in pupils subjected to the confinement and restraint practised in some boarding schools. A constrained monotonous mode of life is unquestionably a fertile cause of consumption, and especially when to this is added privation of the stimuli of exercise, light, and fresh air; and their influence is aggravated by insufficient or unwholesome diet and exposure to damp and cold.

Mental Influences. The mind and the imagination have a wonderful action on the body; but it is extremely difficult to appreciate accurately their effects on diseases. I believe that the depressing mental emotions and affections have a directly sedative effect on the lungs, and as certainly reduce the intensity of the respiratory function, as exercise and muscular action increase it; and, whilst I think that cheerful mental occupation and a hopeful condition of mind have both a prophylactic and curative tendency, which it is most important not to overlook in treating the disease, I feel convinced, from my own observation as well as from some of the facts already adduced, more especially those in reference to criminals, that the depressing mental influences, such as grief, disappointment, anxiety, and the loss of fortune, and especially of friends, have an influence greatly beyond what is commonly attributed to them. I have never seen anything that would lead me to believe that consumption is at all a contagious disease, though I think it is injurious for a healthy person to sleep with one who has active pulmonary disease; but we not unfrequently find a husband, and more frequently a wife, attacked soon after nursing the other. In all such cases, where I have seen one relative attacked after another, I have attributed it to mental depression, and the trial of the feelings which must necessarily be experienced in watching, often for months, the fatal progress of this wasting and distressing disease in a near relative. In the case of a brother or sister, we have also to take into account that these influences act with double force on a constitution hereditarily predisposed.

Defective Diet: Insufficient Clothing: Cold and Damp. These are well known causes, the influence of which has never been underrated. It is difficult, however, to bring forward facts proving clearly the operation of these causes separately, as they generally act in combination with each other, or with some of those already mentioned. I look, however, on them as minor causes; and I may state that, whilst soldiers in barracks are more subject than any other class of persons to consumption, this is not the disease from which they suffer in the field, where they are exposed to all these causes. The Crimean experience proved this, and showed that exposure to cold, wet, fatigue, and insufficient food, caused the development of scurvy and the zymotic class of diseases, fever, cholera, and dysentery; but not consumption. It is also known that the extreme cold of very northern latitudes does not render consumption a more prevalent disease, but has the opposite tendency. This class of causes acts powerfully, however, in conjunction with others.

Intemperance and Irregularities of Living. Though consumption is not the disease to which the habitual drunkard is most liable,—those of the nervous system and of the digestive organs being more common in intemperate persons—yet I have so frequently seen tubercular disease of the lungs in persons of dissolute habits, that I believe it has a powerful influence in conjunction with other causes and irregularities of living, in producing this disease.

On this subject a writer, from whom I have already quoted, observes very justly, that of all vices none are so apt to lead on to consumption as the unnatural or unrestrained indulgence of the sensual passions. To this cause, indeed, the germ of tubercules are very frequently traceable; and I am convinced that the many bearings of this subject upon the physical and mental energies have a much closer and more frequent relationship to phthisical affections than we can ever expect, from their peculiar nature, to see fully demonstrated. It is probably in this way that so much evil appears in the sequel to marriage contracted at too early an age either for the due estimation of its responsibilities or the perfecting of the constitution, the penalty for the violation of such a natural law being exacted in the subsequent establishment of phthisis in the parent or in the offspring, or, perhaps, in both.

Effect of other Diseases. Tubercular deposits are most apt to be formed in the lungs during debilitated states of the constitution, and we know from experience that consumption is not unfrequently developed during convalescence from fevers and other diseases. Scarlet fever and measles are especially liable to stir up the tendency to the disease in children of delicate constitution; and, therefore, in such cases the greatest care should be taken to remove completely the attacks of bronchitis and inflammation of the lungs, which are so frequently induced by these diseases, and to restore the health by suitable tonic treatment, and those means best adapted to prevent the tubercular tendency.

Influenza, bronchitis, and pneumonia, and chronic pleurisy, have also, I believe, in many cases, a direct influence in exciting the deposit of tubercular matter in the lungs. Their influence is most frequently observed in those predisposed, hereditarily, or by the action of the causes which have been already mentioned, and I believe that it has been rather underrated by many medical men, who have appeared to think that these diseases act merely by exciting into activity preexisting or latent tubercles, or are themselves produced by the irritation of the tubercular deposits. In a practical point of view, we must not, however, overlook the fact that tubercle is nearly allied to the lymph effused by healthy inflammatory action, and though ordinary tubercle is usually deposited independent of an inflammation, we know that the products of chronic pneumonia are so nearly allied to tubercle, that they often run precisely the same course; and I believe that when the blood is in a fit condition to cause tubercular deposition, inflammatory irritation will readily determine it in the part so affected.

CASE OF DIPHTHERIA.

By JOHN M. BRYAN, M.D., F.R.C.S.Eng., Northampton.

MASTER B., aged 6, the son of respectable parents residing at a farmhouse in a healthy situation, one mile out of Northampton, was seized with sore-throat on July 9th, 1857. I prescribed an aperient powder of jalap and calomel to be taken every night, without seeing him.

July 12th. I was hastily summoned to the patient, and found the whole fauces intensely swollen and transparently red. Deglutition was painful and difficult; there was high fever; and the pulse was rapid. His bowels had been opened by the powders; and I now ordered eight grains of chlorate of potass to be taken in water every three hours, and the following liniment to be applied to the throat on spongio-piline:

℞ Aceti cantharidis ℥i; spiritûs camphorati ℥ss; olei olivæ ℥i. M.

This soon blistered severely. He was extremely intractable in taking medicines, or in allowing an examination to be made of his throat: the attempt to do so threw him into violent paroxysms, almost amounting to convulsions.

July 12th. The symptoms were much more severe; there was a pale appearance of the whole internal fauces, and a false membrane was forming. I applied freely, twice a day, a solution of nitrate of silver (ten grains to the drachm); and continued the chlorate of potass.

July 14th, 6 A.M. He was much worse, the fauces being quite coated with ash-coloured false membrane. I applied the solution of nitrate of silver, and gave four grains of jalap and a grain of calomel—to be repeated in four hours. The following mixture was also prescribed:

℞ Infusi rosæ compositi ℥ij; acidi sulphurici diluti ♏xv; spiritûs ætheris nitrici ℥i; syrupi ℥ss. M. Fiat mistura cujus sumatur cochleare i medium 3tiis horis.

1 P.M. I again visited him, and applied the caustic solution freely. Some considerable portions of false membrane, of fœtid odour, came away, with some relief. Beef-tea and small quantities of port wine were ordered.

8 P.M. I again applied the solution of nitrate of silver to the fauces.

July 15th, 5 A.M. The symptoms were very extreme, having also become those of decided croup. I applied the caustic solution very freely, by means of a piece of sponge fastened to the end of a pencil, and detached a good deal of very fœtid membrane. Breathing and deglutition were very difficult; and, as there was apparently no chance of recovery, I gave him a grain of sulphate of copper in a teaspoonful of syrup every hour. After he had taken one or two doses, retching and vomiting came on, attended with detachment of quantities of false membrane and tenacious mucus; and a clearing of the throat took place, with

great relief to the breathing. The sulphate of copper was continued at longer intervals for thirty-six hours, together with beef tea, port wine, etc.

July 16th. He was much improved.

July 17th. The improvement continued. The sulphate of copper was given once every four or six hours: sickness followed each dose, with more or less detachment of membrane. His swallowing being now more free, beef-tea and port wine were given largely; and this day he was prevailed on to use the following gargle:

℞ Acidi hydrochlorici ♏xv; mellis rosæ ℥ss; aquæ ℥v. M.

From this time he gradually improved, and would have been soon convalescent, but for considerable sloughing of the external fore part of the throat, that had taken place from the vesicating application used at the onset, so that he was not off my hands, quite well, until August 2nd.

His mother, a young widow, who was in constant attendance upon him, had a smart attack of sore-throat, evidently of the same character, but of a slighter degree; it was removed by the use of hydrochloric acid gargle, with external counterirritation on the throat, and saline aperients.

Remarks. In the foregoing case, although little had been made public at that time of diphtheria, and no case of the disease had previously come under my notice, I had no doubt that it was a more formidable disease of the throat than I had met with for some time, if I except cases of croup. From the intractable state of the little patient, there was not a good chance of using remedies; and although, from having seen many milder cases since, in which the tincture of sesquichloride of iron has appeared of service, yet I feel certain that the sulphate of copper saved this child's life, as I have frequently found in severe and hopeless croup cases, and which, I think, is worth a trial where other remedies fail. There was in this case no evidence of contagion; scarlatina was not prevalent in the neighbourhood; nor was there affection of any internal organs.

Gulstonian Lectures
ON
FEVER AND INFLAMMATION.

DELIVERED BEFORE THE
ROYAL COLLEGE OF PHYSICIANS, LONDON,
1859.

By William Addison, M.D., F.R.S., Fellow of the College.

Lecture II (*continued*).

XI.—Inflammation as a Therapeutical or Depurative Reaction, in Cases of Fever.

In some fevers, or in some cases of fever, the natural depurating organs are sufficient; or, by proper medical treatment, they may be roused to a sufficiency for the elimination and discharge of the morbid matter made over to the plasma from the diseased corpuscles. If this can be accomplished, there will be no call or necessity for any preternatural depurative reaction between the plasma and the common tissue. In such case, therefore, the person has, and must go through, the fever; that is to say, the blood-corpuscles must pass through the phases of their disorder; but he is saved, by judicious medical treatment, from a local inflammation, because distemperature of the plasma, consequent upon disorder of the corpuscles, is met and relieved by the natural working of the depurating organs. These organs act upon the plasma; and inflammation is an action between the plasma and the vessels. By one or the other, or by both ways, the fluid of the blood may be relieved of hurtful matter: and, as the severity and duration of symptoms of fever are a measure of the severity and duration of disorder in the corpuscles, so, we apprehend, the severity and duration of the consecutive inflammations are a measure of ease or difficulty with which the morbid matter separates, or sloughs off, from the rest of the fluid, and is made over to the common tissue for discharge. But, in cases of fever, we apprehend that neither the natural organs nor inflammation can effect this depurative purpose, so long as disorder is limited to the corpuscles.

The *materies morbi* of the corpuscles—of whatsoever nature this may be—must leave them, and be discharged into the plasma, before any depurative means can come into play for the final expulsion of it from the fluid of the blood. This appears to be the *rationale* of our inability, by any means which have hitherto been tried, to cut short the progress of a fever.

The argument respecting the therapeutical properties of inflammation in distemperatures of the fluid of the blood was partially discussed in the first lecture; and we now proceed with what further we have to say on this subject.

Case. At 8 o'clock in the morning of Dec. 28th, a physician, who was assisting at the *post mortem* inspection of the body of a lady who had died of puerperal peritonitis, unfortunately pricked his finger. Twelve hours afterwards, he felt some pain at the part; and he had it touched with nitrate of silver. During the night, shiverings came on, and he felt extremely restless. On the morning of the 29th—the next day—the finger was swollen, and red lines extended up the arm. In the evening of that day, the symptoms were not abated, and there was great prostration. On the 30th, the hand and arm were greatly swollen, the glands in the axilla were affected, and the pain was very great. On the 31st, the pulse beat from 90 to 100 in the minute; and the breathing was heavy and irregular, with torpor and drowsiness. In the evening, all the symptoms were increasing; and now an erysipelatous blush from the axilla extended over the side of the chest. During the night, the breathing became difficult, and the drowsiness passed gradually into deep stupor. Death took place at six o'clock in the morning of January 1st, not quite four days from the infliction of the wound.

In this case, the phenomena, in all important respects, are similar to those observed in traumatic erysipelatous fever, and in puerperal fever. The circumstance of the disease arising in the manner related—namely, from inoculation of a poison from the body of another person who had had puerperal fever—establishes the relation between it and the contagious fevers, and shows that the fatal termination in so short a period is to be attributed, not to inflammation, but to disease of the blood. If this be assented to, the case is taken out of the category of inflammatory diseases, and is placed in that of blood-diseases.

But if this and analogous cases—if erysipelatous fever, puerperal fever, gout, small-pox, and the other exanthematous fevers—be considered as blood-diseases, a great step indeed will have been taken, in the direction we are arguing, towards removing inflammatory reactions altogether from the pathological list; and a wide avenue is opened for a reconsideration of their true import.

Moreover, much doubt is thrown upon the value of the labours of the pathological anatomist, who may regard effects left by internal inflammation in fatal cases of blood-poisoning as showing anything whatever of the nature or seat of the disease. For the question arises, whether inflammation, and the suppurations which may appear in contagious fevers, are not appropriately placed in the same class with inflammation and suppuration in small-pox, sloughing carbuncle, and necrosis of bone; all of which are indisputably therapeutical reactions, the only difference being that, in the one class of cases, the actions arise for therapeutical purposes in the solid parts—the common tissue; in the other, for therapeutical purposes having reference to the fluid of the blood.

If we impartially review phenomena of inflammation as a matter of natural history, and begin with the simplest cases—scalds, burns, sloughs, and fractures (injuries to the common tissue), and boils, eruptions, gout, and small-pox (from injury to the qualities of blood)—we can scarcely fail of perceiving, in both classes, that the forms and amount of the action depend upon, or are governed by, the amount or extent of injury sustained. And, if hindrances protract the process of repair, so also analogous difficulties protract depurative forms of inflammation. If keeping peas in a sore protracts granulation and discharge, so also perseverance in unwholesome articles of food will protract ulceration. In mechanical injuries, the cause of the injury (the heel of the horse, or the cart-wheel), the part injured (the torn flesh, or the broken bone), the extent and nature of the hurt (contusion, laceration, and comminution),—all these, and also the subsequent reaction (the process of repair), are objects either of sight or of touch, or of both. On the other hand, in injuries to the blood, all these things are, and to a great extent must remain, matters of reasoning and deduction. We have said, that very little can be demonstrated of the vital and depurating processes constantly going forward in the blood of the living person. In the engrafted small-pox, it is true, the poisonous matter introduced into the blood, and the consequent inflammation and suppuration in the skin, are seen; but the essential part injured—the elements of the blood—the extent of their injury, and the depurative reactions

going on amongst them, and which connect the introduction of the virus with the fever, and the subsequent inflammation and suppuration, are not seen. Likewise, in the fatal case just related, there was evidence of the introduction of poisonous matter into the blood through the wound of the finger; but the rapidity with which it spread throughout, and destroyed the normal quality of the blood, was only to be proved by the rapid course of the symptoms and the fatal termination. In this case, we argue that the inflammation and swelling of the glands in the axilla were reactionary efforts to arrest the course and eliminate morbid matter, though they failed: and they failed upon the same ground that similar efforts fail in cases of severe mechanical injury; namely, because the injury inflicted on the blood was so great that life succumbed before measures of relief could come effectually into play. In severe mechanical injuries, persons sometimes die before, or soon after, a process of repair is established; so likewise, in injuries to the blood, persons will die before any inflammation appears.

XII.—Diseases of the Corpuscles of Blood.

With respect to disease or abnormal metamorphosis of the corpuscles of the blood, and its association with symptoms of fever, numerous observers have described their darker colour, and the easy transudation of their colouring matter in typhus. Denis, for example, describes the blood in typhus fever as deficient in fibrine. He says that air had no effect in reddening it; and, on analysis, it was found to contain ammonia. Dr. Armstrong observed the blood in typhus from the temporal artery as dark as that from the veins.

The general appearance of blood in malignant fevers has been described by Huxham and Fordyce. At the first commencement of symptoms of fever, the blood was sometimes buffed; but the clot beneath was always of a loose texture, scarcely cohering, and very dark in colour. If the patient was bled two or three days after the onset of fever, the blood was found incoagulable, having the appearance as when spirits of hartshorn is added to blood as it runs from the vein, which darkens its colour, and prevents coagulation.

In the yellow fever of the West Indies, blood has been observed to be hotter than in health. As fever progresses, it becomes black and thin. Dr. Blair says that, in many instances, the corpuscles were found so much dissolved that, in several specimens of fever-blood, but few of them could be observed.

It has been found that a diminished amount of carbonic acid is discharged from the blood by respiration in cases of fever; and this fact, taken in conjunction with the dark colour of blood, is conclusive as to one, at least, of the functions of the corpuscles being disordered in fever.

Rokitansky, Simon, Perry, and many other accurate observers, all speak of the dark colour and changed state of the corpuscles of blood in malignant fever, of the incoagulability of the plasma, and of the staining of the tissues and of the serum by the colouring matter which transudes the corpuscles.

As regards the microscopical appearances of the corpuscles of blood in fever, we hesitate at present to lay any stress upon them; because in persons in health, they very speedily change their figure and outline in a very uncertain manner. Some of them become notched with projecting points, and otherwise changed in outline; others assume globular forms; they are influenced as respects these changes, it would appear, by the temperature of the glass upon which they are received for examination, and by the way in which they are covered by the thin glass. Some are seen paler, and some smaller than others; some adhere closely together in rolls, others float about separately without the least disposition to adhere to their neighbours. All these varieties may be seen in the same small quantity of blood which is alone available for microscopical inspection, especially if the exterior edges of the film of blood be brought into the focus of the microscope.

Notwithstanding these obstacles to the drawing any positive conclusion from the microscopical appearances of the blood-corpuscles in cases of fever, it is quite as likely to be by the microscope as by chemistry that future advances in the pathology of these bodies will be made. For how can any bulky chemical manipulation satisfactorily eliminate results from the plasma from results from the corpuscles? especially if, under the influence of reagents, as we shall show, they throw out matter from their interior into the fluid in which they swim, and yet preserve their integrity or individuality. "Hitherto, at all events", as Rokitansky has well observed, "chemistry cannot be said to have excelled, as respects the pathology of these bodies, the achievements of a circumspect anatomical survey, notwithstanding the limited resources at the disposal of the latter."

Experiment I. Take a slip of glass, such as is used for mounting microscopical objects, receive on it a very small drop of blood, and place close to it with a pipette a drop of any fluid, chloroform, ale, weak sugar and water, etc., and the quantity of the extraneous fluid should not exceed the quantity of blood. Upon now dropping on the two fluids a thin piece of glass, their nearest edges will mingle, but in various proportions.

In these experiments we find the *outline* and the *interior* of the corpuscles of extremely various appearances in the same experiment, but nothing appears thrown out from them.

Experiment II. Proceed as in the last experiment, but let the fluid used be sherry wine. The corpuscles, along the line where the blood and wine mingle, will soon begin to throw out molecules around their circumference, many of which pass away into the fluid; others grow out into long tails, which remain attached to the corpuscles, and terminate in a knob. They also wave about in a very singular manner. After some time (half an hour), the tails or filaments become nodulated, and then break away from the corpuscles, and when they have done so, they continue their singular movements in the fluid.

Some years ago, when making observations on the plasma or liquor sanguinis of blood, drawn by venesection in cases of fever and inflammation, we observed in the fluid a vast multitude of minute molecules. (*Medical Gazette*, vol. ii, 1841-42.) And the molecules seen in the experiment here related, are precisely the same in magnitude and appearance as those we saw in the fluid of blood drawn in the cases of fever. Now we believe that the blood-corpuscles do not immediately lose their vital or chemical properties when withdrawn from the body. Therefore, we regard the remarkable forms and actions they exhibit under the influence of sherry wine, as phenomena of a species of reaction, which, amongst multitudes of them, is various or unequal, hence the various appearances presented. In some, the resistance offered to the extraneous fluid is more easily overcome than in others.

We have frequently examined with the microscope blood taken from persons affected with scarlet fever, with reference to the appearances in the plasma, and have always noticed the following facts. The colourless or plasma corpuscles are much more numerous than in persons in health, and especially so if the blood be drawn from the skin as the fever is passing off and the epidermis beginning to exfoliate. They are of different sizes and present different appearances. In the open spaces between the rolls of the red corpuscles, irregular masses of granular matter and numerous free molecules are seen floating in the fluid.

In cases of diphtheria, we find that the plasma presents the same appearances as are seen in scarlet fever. Formerly we supposed the free molecules observed in the plasma of blood, drawn in cases of fever and inflammation, to be derived from the colourless corpuscles; but now that we have seen them thrown out by the red corpuscles, there is actual proof that these corpuscles, in their reactions upon extraneous substances, do themselves throw off matter into the fluid in which they swim. The appearances, then, which we have seen in the fluid of the blood in cases of fever, and the behaviour of the corpuscles in the experiment we have related, appear to corroborate our conclusions respecting the excretions of the corpuscles passing into the plasma, and the association of these excretions with phenomena of fever.

Before proceeding with our argument, it will be convenient now to refer to some collateral incidents which require our notice.

First, it may be objected to our proposition respecting the antecedent of fever, namely, disorder or disease of the blood-corpuscles, that in venosity of blood, where a poisonous element of the corpuscles fails of being discharged by respiration, the symptoms are those of brain disturbance, and not of fever. In *morbus cæruleus* there is no fever necessarily.

To this objection it may be replied, that the presence of a venous quality in the corpuscles does not imply disorder or disease in them, in the same way that it is concluded to arise from miasms in the air. The substance—carbon or other matter—which gives to the corpuscles their venous character, is a substance natural to them, an essential ingredient of their composition in certain parts of their course in the circulation. Therefore, it is to be expected, it would occasion no unusual reaction on the part of the corpuscles themselves, though the brain suffers; whereas, a poison from the air may be presumed something quite heterologous to the corpuscles, and doubtless they react with more energy against a foreign injurious

matter, than against anything which is a part of their normal composition.

In cases of blood-poisoning through the stomach, such as drunkenness from alcohol, narcotism from opium, and salivation from mercury, the locality and character of the symptoms point out which organ it is that suffers first or most from a particular poison diffused through the plasma. And if in these examples fever be absent, the argument is, that the parenchymatous organ is affected before the corpuscles of the blood, fever appearing when they partake of the disorder.

In cases of blood-poisoning through the lungs, on the contrary, the symptoms begin with fever, and the argument is, that the corpuscles of blood are here affected first, before the plasma or any of the local parenchymata; fever denoting an abnormal metamorphosis of the corpuscles.

A venous state of the corpuscles of blood is not an abnormal metamorphosis. The condition comprehended in the term venous is one natural to them. Misplaced venous corpuscles disorder the brain; but fever does not appear, because the venous state is natural to the corpuscles. The absence of symptoms of fever, when venous blood circulates arterially, is therefore no valid objection to the proposition we are arguing.

Again, we have hitherto purposely abstained from any reference to the brain or nervous system as causes of fever and inflammation, not because we underrate their powerful influence over blood and the secretions, but because so important a part of our subject requires a special consideration, which we can here but briefly indicate.

It has been argued in the former lecture, that the elements of the parenchymatous organs and the corpuscles of blood have the common properties of other living cellular bodies; and among these are properties of affinity, which differ in relation to different substances. And there can be no doubt that the corpuscles of the blood, as respects the various substances they encounter in their course during circulation, have much more intimate relations with (or a greater affinity for) some than others. For example, in the lung, a special reciprocal action takes place between the corpuscles which are within the vessels and the air which is outside them. And, as if to facilitate this action, the coats of the blood-vessels in the cells of the lung are reduced to an extreme degree of thinness.

Now, it may be argued of any other special organ, where the coats of the capillary vessels are reduced to a still greater degree of thinness than in the lung, that they are so for a similar purpose. Thus, in the brain, an organ very largely supplied with blood, the coats of the extreme vessels are so thin that we fail to trace them in all their various ramifications: indeed, so entirely are they altered that the elements of the organ have but a slight coherency. And, unless the contrary can be shown, we may infer this disappearance of the ordinary properties of blood-vessels to be for the purpose of removing all obstacle to the closest possible contact between the corpuscles of the blood and the parenchyma of the brain. This inference is corroborated by the fact that the brain is the organ specially affected by an abnormal circulation of venous corpuscles. That is to say, the brain is the organ which first detects the presence of an abnormal venous quality in the corpuscles.

If, then, we may regard the thinning away of the coats of the capillaries of the brain as facilitating a contact-action between the corpuscles of blood and the substance of the brain; and if, moreover, we are able to appeal to the known effect of venous corpuscles upon the functions of the brain denoted by drowsiness, stupor, delirium, and coma, as proof of a special action between the brain and the corpuscles, then we may claim the constant occurrence of similar cerebral disturbances in fever as corroborative of the view which bases phenomena of fever upon abnormal metamorphosis of the corpuscles of blood; the brain—to use a chemical phrase—being the test of the condition of the corpuscles.

All the functions of a living body may be comprehended as a series of actions and reactions; and, if it be admitted that the corpuscles of blood do perform a special function in the brain, there must necessarily be reaction from the brain upon the corpuscles.

CASE. A young married woman, aged 19, was delivered of her first child. The labour was natural, and she went on favourably until the fourth day from her confinement, when her husband stayed out late at night, and returned home drunk from a fair, very much knocked about. By this she was thrown into a state of great nervous excitement. Very shortly after, she was seized with a numbness of the legs and shivering, and then with pain in the head and wandering of the mind. The secretion of milk was interrupted; the skin became hot and dry; no sleep could be procured; and the pulse beat 120 in the minute. The wandering of the mind passed into furious delirium, and all the symptoms of fever and excitement continued for several days. It was only by judicious medical treatment and careful nursing that the disorder was subdued on the seventeenth day.

In this case, we argue that the fever arose, not immediately from the nervous shock, but from disorder of the blood-corpuscles; and, as our researches have led us to interpose distemperatures of the fluid of the blood between errors in diet and inflammation, and disorder of the corpuscles of blood between aërial miasms and fever, so analogously of mental emotions and nervous shocks, when they occasion or aggravate fever or inflammation, we conclude they do so by disordering, or adding to the disorder, of one or other, or both parts of the blood. Errors in diet do not produce inflammation, unless the fluid of the blood be distempered: also a miasmatous air does not produce fever, except the blood-corpuscles be affected; so, too, great convulsions and loss of consciousness (in epilepsy, etc.) pass away without fever, if the blood be not affected. The close sympathy between states of the corpuscles of blood and the brain, then, supports our proposition that symptoms of fever and the generation of poisons in the blood are to be based upon disorder of the corpuscles.

[To be continued.]

Abstract of a Lecture

ON THE

CLASSIFICATION AND GEOGRAPHICAL DISTRIBUTION OF THE MAMMALIA.

DELIVERED IN THE SENATE HOUSE OF THE UNIVERSITY OF CAMBRIDGE, MAY 10TH, 1859.

By RICHARD OWEN, D.C.L., F.R.S., etc.

THE learned Professor expressed his sense of the honour which had been done to him by the appointment to the Sir Robert Reade's Lectureship,* and the pleasure it would afford him to give to the members of the University a brief account of some of the prominent features of one of the divisions of the animal kingdom. He had selected the subject of the Classification and Geographical Distribution of the Mammalia, because it afforded an opportunity of taking a general survey of one of the most interesting domains of nature in the short period allotted to a single lecture.

He detailed briefly the principles and peculiarities of the classifications which had been respectively formed by Aristotle, Ray, Linnæus, and Cuvier. The first of those naturalists had evinced a very extensive and correct knowledge of the mammalian group, by including the cetaceans in it, and by the manner in which he had divided it into the three great classes of BIPODA, TETRAPODA, and APODA. From the time of the publication of his remarkable treatise, Αι περι τα Ζωα Ιστοριαι, a period of more than two thousand years elapsed without any advance in the subject; and nothing indicated more forcibly the decadence or dormant condition of the human intellect, during a great part of that period, than the dearth of new facts and generalisations in natural history. To Ray, a member of the University of Cambridge, was due the merit of again opening up this interesting field of knowledge, of adding many new facts, and especially of pointing out clearly the distinctions of class, order, genus, and species; but in his generalisations he was, in some points, inferior to his great predecessor, whose classification he in the main adopted. Cuvier had given a great impulse to the science; and, by dint of vast research and unusual capacity for generalisation, had worked a far more complete and satisfactory classification than had hitherto been attained. His classification had been generally followed in the

* The endowment for this lectureship was given to the University in 1524, by Sir Robert Reade, Lord Chief Justice of the Common Pleas in the reign of King Henry VIII. A statute approved by Her Majesty, by order in Council, April 6th, 1858, directs that the lecturer shall deliver one lecture in term time in every year. The lecturer is to be appointed by the Vice-Chancellor during the Lent Term in every year, and to deliver his lecture in the Senate House, on a day to be fixed by the Vice-Chancellor. The present Vice-Chancellor accordingly appointed Professor Owen, being desirous that the office should be held for the first time under the new statute by one who would shed a lustre upon it, and who at the same time is not a member of the University.

early part of this century; nevertheless, there were felt to be some defects in it, and the minds of anatomists had been preparing for some modification of it. It was the lecturer's good fortune to have the opportunity of examining many animals which had not before been dissected, especially those from Australia, which had been brought over to our Zoological Gardens; and he had been enabled to establish the separation of the marsupials and monotremes as a distinct class. Nevertheless, he did not feel quite satisfied, and had bestowed much labour for many years upon the investigation of the characters of the brain in the different classes of animals; and, two years ago, he felt himself strong enough to draw out a classification of mammals founded upon the differences in the characters of the brain. That organ consists, in mammals, of four parts—the cerebellum, the optic lobes, the cerebral hemispheres, and the olfactory lobes.

In the lowest order of mammals—the non-placentalia—which includes the monotremes and the marsupials, there is no connecting medium or commissure (*corpus callosum*) between the cerebral hemispheres; and these parts are very small. These animals, therefore, he names Lyencephala, or loose-brained. He had paid particular attention to the habits and characters of these animals, to ascertain with what peculiarities the absence of so important a part of the nervous centre is associated; and he found that there is in them a remarkable want of *memory*. The keepers in the Zoological Gardens observe that these creatures do not become familiarised with them, or recognise them. And though, in external features, some of the non-placentals resemble certain of the members of the placental class, yet the following difference may usually be remarked. The member of the latter—a carnivorous animal, perhaps—when put into his cage, will at first seek to discover means of escape, will try every panel, and search every corner; but, having spent a day or two in this way, he gives up the search as useless, and resigns himself to the occupation of walking to and fro in his den. The lyencephalous animal, on the contrary, unable to profit by the experiences of former trials, continues over and over again to repeat the same fruitless efforts to liberate himself.

The metropolis of the marsupials is Australia; and the pouch, into which the young is conveyed immediately upon birth to be protected and fed, serves as a sort of portable nursery, enabling the mother to carry her offspring about with her. This must be associated with the remarkable dearth of water which is often experienced in Australia; one or two, or even nine years, sometimes passing, during which there is scarcely any rain. In this time, the pools, and even the rivers, become dried up; and the animals must travel many miles in search of that necessary of life—water. Were they, under these circumstances, obliged to leave their young behind, these would perish ere their return.

As an evidence—one to his mind the most striking—of design in the work of creation, Professor Owen instanced the provision for the feeding of the young marsupial. While in its mother's pouch, it is too young and feeble to make any effort to provide for itself. The milk must be forced down its throat, and would find its way into the trachea, as well as into the œsophagus, were it not that, during the process of feeding, the larynx is carried forward to the back of the nostrils, so that the milk can pass safely down on each side of it while respiration goes on. There is a provision in the mother to propel the milk into the mouth of the young; and there is this provision in the young to secure the proper transit of the milk into the œsophagus. If, in the coincidence and adaptation of these provisions to one another, there is not design, where are we to look for it?

The next class of animals he calls Lissencephala; because in them the cerebral hemispheres, though larger than in the preceding class, and united by a transverse commissure, are quite smooth—that is, without convolutions. This includes the rodentia, bruta, insectivora, and cheiroptera. They are cosmopolitan, being found in all parts of the world, though a large number of them are natives of South America, and some are confined to that region. The instincts are commonly much developed in them.

Under the name Gyrencephala he classes the animals in which the increased amount of grey matter requires for its packing that the exterior of the cerebrum be thrown into convolutions or *gyri*. This part of the brain is also much larger than in the former classes. The cetacea, sirenia, toxodontia, proboscidia, terissodactyla, artiodactyla, carnivora, and quadrumana, are included in this class.

The Professor pointed out some of the chief distinguishing features of the several orders, particularly with reference to the locomotive organs and the teeth. He drew attention to the fact that, in animals where the numbers of the toes are even (as in ruminants, where there are two; and in the hippopotamus, where there are four), the stomach is complicated in its structure, and the colon is simple; moreover, the articular surface of the astragalus is divided into two equal, or nearly equal, parts; and the structure of the teeth is symmetrical: whereas in the animals, where the number of the toes is uneven (as in the horse, where there is one; in the rhinoceros, where there are three; and in the elephant, where there are five), the stomach is a simple bag; the colon is more complicated; the articular surface of the astragalus presents unequal facets, or only one; and the structure of the teeth is unsymmetrical. Further, in the even-toed animals, it is very curious that the horns are always in pairs, usually two; or, if more than two, there are four, two being placed behind the others: whereas, in the uneven-toed animals, there is rarely more than one horn, which is in the middle line; and if there be more than one, as in the two-horned rhinoceros, they are still not in pairs, but in the middle line, one behind the other. Thus some countenance is given to the Platonic idea of the prevalence of numbers.

The highest class, Archencephala, which comprises only man, is distinguished by the great development of the hinder lobes of the cerebrum; these quite covering the corpora quadrigemina and the cerebellum. The posterior horns of the lateral ventricles, and the hippocampus minor, are peculiar to man, not existing in any other animal. Coincident with this perfection of the brain, we find a corresponding perfection in the other organs, as evinced by the more complete manner in which particular parts are devoted to particular purposes. This is especially seen in the case of the foot, which, by the strength and conformation of its components, and by the construction of the great toe, is enabled to do the whole work of bearing and propelling the body, so that the upper pair of limbs are left free to minister to the intelligent will.

The Professor concluded by an eloquent appeal to his audience to set a proper value upon that marvellous mechanism with which they were gifted, and which was fitted to be, and which ought to be, the tabernacle of the Holy Spirit.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

THE APPLICATION OF STRONG NITRIC ACID IN SOME FORMS OF ECTROPION.

By Edmund Boult, Esq., F.R.C.S., Surgeon to the Bath Eye Infirmary.

[*Read April 21st*, 1859.]

In the spring of 1854, F. P., a young girl, aged about 14 years, apparently of a strumous diathesis, with large prominent eyes, applied at the Bath Eye Infirmary, for the relief of an affection of the conjunctiva lining the lower lid of either eye, which had existed as long as she could recollect. It consisted in a chronic hypertrophy of the mucous membrane, which was of a bright scarlet colour, and by its morbid growth appeared to evert the tarsal edges of the lids themselves, and then superadded a state of ectropion, the bulbs of the lashes were, for the most part, destroyed, but below the tarsal edges the integument was normal. In other respects, the eyes seemed healthy, and the patient's present condition was tolerably good. It did not appear that the girl had hitherto undergone much treatment, but she was now anxious to have the disease removed, for the appearance she presented was singularly unsightly.

Though constitutional treatment is usually recommended for this affection, I did not think it promised much in this case; the disease had probably originated in some constitutional error, which might not now exist, but the faulty nutrition of the parts continued.

It at once occurred to me that, by the cautious and persistent use of nitric acid locally, the abnormal structure might be effectually removed; and the result did not disappoint me.

Strong nitric acid was applied freely over the affected part of one eyelid, at intervals of seven or eight days, or more, accord-

ing as the eschar produced was disposed of; and, in a very short time, a very sensible difference was perceptible in the relative appearance of the corresponding lids. The operation was very painful, and ultimately the girl became tired of it; and she ceased to attend at the Eye Infirmary, and she was lost sight of for a period of five years. A few months since, she again appeared at the Infirmary; one lid perfectly cured, and looking quite healthy (with the exception of the want of the eyelashes, and the absence of epithelium on a small portion of the tarsal margin). The other eye still showed the original affection much as it was five years previously.

The girl stated that she had been out of Bath, and had visited London and other places; and she had consulted several surgeons, who gave her no hope of a cure; but she told them she knew she *could* be cured, but did not fancy the pain.

On reflecting the lid that had been subjected to the action of the acid, there was no hypertrophy perceptible; the only traces of the disease were strong bands of membrane, something like those produced by the application of lime to the conjunctiva, but not so thick or "fleshy".

At her own request, she was now subjected to a repetition of the nitric acid treatment on the right eye; and the result has been precisely the same as on the former occasion—a gradual destruction of the abnormal tissue, and a subsequent contraction of the parts acted upon. She may now be pronounced "cured" of a very troublesome and unsightly affection, not amenable to any other treatment that I know of. Of course, the hair-bulbs being destroyed, and there being some partial denudation of the epithelia on each tarsal edge, the eyes do not look perfectly natural, but are, no doubt, wonderfully improved.

Remarks. I do not suppose there is anything like novelty in what I have now described; but I wish to call attention to this mode of treatment, which, so far as I am aware, has almost fallen into desuetude. It is alluded to by Mackenzie and other systematic writers; and, in Guthrie's work on *Ophthalmic Surgery*, a full account of the treatment of ectropion, and other cognate affections of the eye, by the use of caustic acid, is given. The acid he was in the habit of using was the sulphuric.

There does not appear to be any difficulty or danger to the eye itself in the cautious application of these acids to the conjunctiva; their corrosive action seems to be strictly limited to that part of the tissue to which they are immediately applied. The purest anhydrous nitric acid is the best for the purpose. The operator using this, will be less liable to annoy the eye with fumes; and, the destruction of tissue being more immediate and effectual, the operation will be proportionately less painful. To apply it, let an assistant place a piece of lint, soaked in olive oil, over the eye, and pass it down between the ocular layer of the conjunctiva and the part to be destroyed, taking care that the oil shall not touch the latter. Then let the surgeon, having first dried the parts, take a glass-brush dipped in the nitric acid, and pass it slowly over them, allowing it to remain sufficiently long to form a thin white eschar. Let the tissue then be exposed to the air (still separate from the reflected layer of the membrane) until it be quite dry. Afterwards, if he like, he may wash the parts with a weak alkaline solution (though I do not consider this necessary); and, lastly, let him smear the whole with olive oil.

The immediate effect of the acid is to swell up the lids, and to produce a great deal of severe pain and lachrymation, which, however, soon subside. It will not be necessary to destroy the whole of the diseased structure, as a good deal of allowance must be made for subsequent contraction: indeed, Mr. Guthrie cautions us to remember this after effect, and recites a case in which he produced the opposite affection ("entropion") by his too great anxiety to cure the disease effectually.

I am of opinion that, applied with care and discrimination, strong nitric acid will be found as useful a remedy in several affections of the palpebral mucous membrane, as it is in some of those diseases of the same tissue in the neighbourhood of the rectum.

Discussion. Mr. George, when attending the hospitals at Vienna, some years ago, had seen the greatest advantage derived from the practice advocated by Mr. Boult. Free application of the strong acid, whether nitric or sulphuric, was more successful and advantageous than the removal of the parts by the knife.

Mr. Bartrum had been gratified by observing the progress of improvement in Mr. Boult's case.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

ON VACCINATION, AND THE LAWS RELATING TO IT AND THE REGISTRATION OF BIRTHS.

By J. S. Fletcher, Esq., Bromsgrove.

[*Read April 21st*, 1859.]

The honorary secretaries having kindly complied with my request to insert in their notice of meeting a copy of some of the propositions I intend to offer, I forward them for your perusal, and if thought worthy, I wish them to be recommended for consideration in the framing of any new law on vaccination. Much good might also arise from a resolution, expressive of the extent of the inability of vaccination in conveying other diseases, and that when small-pox occurs after vaccination, it arises (as small-pox does after small-pox) rather from a power in the constitution to re-form a peculiar principle in the blood, which had been destroyed by the vaccination, than from any co-existing disease of the skin at the time of vaccination.

These views are at variance with those of Jenner, who says: "I cannot account for failures, unless from the co-existence of cutaneous diseases." "One herpetic pustule is capable of deranging the whole vaccine pustule: subdue it, and all goes on correctly." "If the vaccine pustule goes through its stages correctly, the person is secure. If not, how can they be?" "I am convinced herpes is the great and grand impediment to successful vaccination." "Do not forget to look sharp after tinia capitis, sore eyelids, ears, etc." "The more," says Jenner, "I reason upon it, the more I am convinced that it is correct, that poisonous animal fluids are *not* absorbed and carried into the blood."

Opinions like the above are not only erroneous; but when circulated, as some of them recently have been, by high authority, are calculated to mislead and alarm the public, and prejudice people against vaccination.

At present, the person who registers the birth is practically the only individual against whom proceedings can be taken if vaccination is neglected. We therefore find "that many persons avoid having their children registered, to escape the law relating to vaccination." (*Registrar General's Report.*)

I propose that any parent or person having the care or custody of a child above three months old, whose vaccination has not been registered by the registrar of the district where the child was born, and on forms supplied to him according to Form A, shall, on conviction, pay a fine not exceeding ——.

By adopting forms according to Schedules A and B, all other bookkeeping will be dispensed with. By going over Book A, the registrar at once sees who is and who is not vaccinated, and who are exempt or dead; and the duplicate of Schedule B gives him a true *uncomplicated* return of all vaccinated gratuitously. No appointment of public vaccinator or districts or stations will be required; for the poor will no longer be debarred selecting their own medical man for the gratuitous vaccination of their children.

It is impossible to estimate the number of children born whose births have not been registered. The Registrar-General, in a letter to me some years ago on the subject, said: "Perhaps half a million may have escaped registration." The birth of not one of my five children has been registered; and I have in the country portion of my district in one afternoon vaccinated seven whose births had not been registered.

The law at present limits the period of registration to six months; and if the child is six weeks old, 7*s.* 6*d.* must be paid for its registration. The birth of a child may be registered *without a name*. None but the parent or householder can register a birth. I would propose that the father, if living with his wife, shall register the birth and name within days; and if the father cannot register it, then those present shall themselves be responsible. A fine of should be paid for neglecting to register.

The law expects the birth of children when born alive to be registered, but it refuses to allow of still-born children; hence it creates a very strong inducement for a class of females to commit infanticide, which the registration I propose would most materially tend to prevent. To register all births would cause unnecessary trouble; but as the eyelids of the fœtus uniformly open by the sixth month, and as a child if born alive before that time cannot live, I would propose that if the eyelids cannot be separated, the fœtus shall be considered as an abortion, and the woman said to have miscarried: but if

the eyelids *can* be separated, the fœtus shall be looked upon as a child, the woman as having given birth to a child, and dead or otherwise it must be registered.

[SCHEDULE A.]

Register of Vaccination.

Name of district.
Name of registrar.
Name of child.
Residence of child.
No. in Register of Births.
Date of registration of birth.
Date of registration of vaccination.
Name of medical man.
Residence.
Date of exemption from inability to take vaccination.
Date of exemption from state of health.
Date of death.

[SCHEDULE A.]

Certificate of Vaccination.

Name of district.
Name of registrar.
Name of child.
Residence of child.
No. in Register of Births.

This is to certify that the above child was vaccinated by , on , and I have this day seen the above child, and the vaccination has taken a successful effect.

Date. Name of medical man.
Title.
Residence.

[SCHEDULE B.]

For Gratuitous Vaccination.

Name of district.
Name of registrar.
Name of child.
Residence of child.
No. in Register of Births.
Date of issue.
Date of return.
Date of payment.

[SCHEDULE B.]

For Gratuitous Vaccination.

Name of child. | Residence. | No. in Register of Births.

This certificate is for the gratuitous vaccination of the above child, and *any* qualified medical man shall, on returning it to me properly filled up, receive the sum of [*a uniform fee*] within 28 days of quarter day.

Date. | Name of registrar. | Name of district.

N.B.—If above a mile from my residence, the quarter's account will be sent by post-office order, unless otherwise requested.

I have this day certified to the vaccination of the above child, and having made no charge to the parents or other person, request payment of the above fee.

Date. | Name of medical man. | Title and residence.

To be kept by the Medical Man till paid.

Name of child. | Residence. | No. in Register. | Name of district and registrar.

I have this day received the fee for the gratuitous vaccination of the above child.

Date. Name of medical man.
Residence.

THE MEDICAL COUNCIL.

BRANCH COUNCIL FOR IRELAND.

Wednesday, April 20th, 1859.

Present:—Dr. Smith, in the Chair; Dr. Stokes, Dr. Williams, Dr. Apjohn, Dr. Leet, and Dr. Corrigan; Dr. Maunsell, *Registrar*.

The minutes of last meeting were approved and signed.

It was then resolved—

"That this Council having considered the Draft Case for Counsel prepared by the Executive Committee, are of opinion that it does not set forth the points relating to the question of the Registration of Licentiates in Midwfery in such a way as to elicit a satisfactory opinion; and that this Council decline to make any observations upon it in detail, as the Executive Committee, in transmitting the case for the observations of this Branch Council, have stated in their resolution of the 8th of April, that in communicating a copy of the case they claim the right of deciding in what form it shall be submitted to counsel; but that this Council desire to direct attention to an inaccuracy in point of form in the wording of the case, in the statement it contains, that it has been prepared 'on behalf of the General Council.'"

It was then proposed by Dr. APJOHN—

"That having carefully considered the entire question, we have placed upon paper our ideas on the subject, in the form of a case for counsel, and do direct the Registrar to transmit this document to the Executive Committee for its information."

The motion was seconded by Dr. STOKES, and the question having been put from the chair, a division was taken, when there appeared—*Ayes:* Dr. Apjohn, Dr. Stokes, Dr. Leet. *Noes:* Dr. Smith, Dr. Corrigan, Dr. Williams. The Chairman having then given his casting vote against the motion, it was decided in the negative.

Dr. STOKES then proposed—

"That having carefully considered the entire question, we have, with a view of assisting the Executive Committee in this matter, placed our views on the subject on paper, in the form of a case for counsel, and that the Registrar be directed to forward this document to the President of the General Council."

The motion was seconded by Dr. APJOHN; and the question having been put from the chair, a division was taken, when, the same councillors voting as in the former division, the motion was decided in the negative.

C. H. LEET.

British Medical Journal.

SATURDAY, MAY 21ST, 1859.

ILLEGAL PRACTITIONERS: WHAT SHALL WE DO WITH THEM?

IT is clear that, if we wish the profession weeded of the innumerable quacks that still flourish among us, we must look out for other machinery for performing that operation than the Medical Council. It was too fondly believed that, upon the passing of a Medical Act, these gentry would at once disappear like ghosts at cockcrow.

But how does the matter stand? Not only do we find the old quack names stuck up in their accustomed filthy corners; not only do we see their advertisements at length in the London and provincial press, filling hundreds of columns, and meeting the eye of thousands of our youth; but some of them have actually the effrontery to boast that their names will not be found in the forthcoming Register. The very compilation of this Register has brought to light the fact that there are a multitude of persons at present practising in this country without any license whatever; and there is every reason to believe that, for many years past, a regular system of successful frauds, such as that which came to light in the Evans Reeves and Protheroe affair, has been carried on with impunity in this country—and not only in this country, but in foreign countries also.

We have now upon our table the particulars of a transaction of this character, in which the persons surreptitiously seeking a degree had recourse to an agent in the United States. The machinery by which, as it appears, the honour is to be obtained—for the matter is still under negotiation—is, of course, the "almighty dollar"; a certain number of the professors of a given university being reported to wink favourably in consideration of a certain sum paid down. So many cases of a similar character have, we hear, been discovered, that we fear that agencies of this nature are in too successful work; and that "smashing" of this kind has grown into a regular trade between the knaves of the two countries.

Independently of these concealed manœuvres by which ignorant quacks manage to place themselves on a level, so far as diplomas go, with regular practitioners, there are a number of mean and pitiful "dodges" by which less adventurous persons manage to poach upon the medical manor. Thus, country places and the suburbs of the metropolis are infested with a swarm of persons who style themselves "surgeon-dentists"; leading the public to believe that, although practising a mechanical art, they have the advantage of belonging to a College of Surgeons. Another class, who more boldly fly at all game, manufacture a qualification by simply taking the word "surgeon" as a prefix to their names: thus we have met with brass plates resplendent with the names of "Mr. Surgeon Brown", "Mr. Surgeon Robinson", and the like.

With all this mass of fraud patent before us, the question is —How shall we get rid of it? The Medical Council will not, we believe, interfere actively for suppressing it; that is to say, by prosecution. The evil is so great, that they plead the impossibility of attacking it unless they transform themselves into a club for prosecuting illegal practitioners, to the exclusion of their other duties. The Registrar is aghast at the frightful state of things he has discovered; and, like a character in a popular German tale, he seeks hastily to shut the lid, the opening of which has disclosed to him the presence of such a legion of foul fiends.

But, if the Council will not undertake the task, must it remain undone? Are legal and illegal practitioners to remain as heretofore, like wheat and tares in the same field? Is our only protection to be the Register, which the public, our employers, will not, as a body, consult for a considerable time at least, and which, for all purposes of protection against a certain low form of quackery, might as well be written in the cuneiform character? The answer, we fear, cannot be in the affirmative. We must manage to destroy, with a strong hand, the weeds as they spring up. The delicate inference that a practitioner must be illegal because his name is not to be found in the regular list, will kill the trade of no quack. We must be prepared to throw stones, failing this polite kind of inferential turf. And we must do this by means of local societies organised for the purpose, the model for which is the London Medical Registration Association.

This Association, by the suppression of the "Bennett Gang", has proved that it can bite as well as bark. The manner in which it rooted out the obscene creatures who had been so long fatting upon the fears and miseries of their fellow men, was most admirable. The vermin dared not even face their accusers in a court of justice; and a complete victory crowned the maiden efforts of the Association. There is no reason why the same process may not be brought to bear upon hundreds of others, who are playing as profitable a game at the expense of the public as these Bennetts did.

We must, however, multiply our Association for this purpose. The very success, indeed of the London Medical Registration Association ought to warn our country friends to be on the alert; for, as sure as day follows night, the eradication of quacks from the metropolis will be followed by their appearance, under new disguises, in the provinces. We may be sure that the Bennett gang are already setting their springes in some one or other of our great country towns.

In connection with our own Association, there are already established a number of Registration Societies throughout the country. We venture to suggest that these may so enlarge the sphere of their duties, as to include the duty to themselves of seeing that knaves and quacks in their neighbourhoods are not reaping the harvest, while they are reduced to the condition of mere gleaners. Even in cases where the law will not reach individuals who have usurped medical titles, such Associations would prove very useful in keeping the public well informed as to their real characters; and we have no doubt that, if their powers of offence were vigorously put in action, quackery would find it difficult to hold its own, and much more to flourish as it has hitherto, in the most glaring manner, among us.

THE WEEK.

A case is at present undergoing judicial investigation, which promises to become one of the *causes célèbres* of our medical jurisprudence. The point to be ascertained is, whether or not a person named Smethurst, residing at Richmond, and alleged to be a member of the medical profession, is guilty of having caused the death of a lady named Banks by administering to her, from time to time, small doses of arsenic or antimony. As far as the results of the examinations of the accused before the magistrates and the coroner have been made known, it appears that the deceased had resided at a boarding-house in Bayswater; that Smethurst had resided in the same house with a female whom he called his wife; that, in a short time, he married Miss Bankes, with whom he thenceforth resided at Richmond; that soon afterwards (towards the end of April) the deceased was seized with obstinate diarrhœa and vomiting; that, notwithstanding the endeavours of Drs. Julius and Mr. Bird of Richmond, and Dr. Todd of London, who saw the patient, the disease increased, and presented symptoms which could with difficulty be explained, except on the supposition that poison had been administered; and that the deceased expired on May 3rd. It has been stated also by a sister of the deceased, that Smethurst was in constant attendance on the patient, and apparently very desirous that she should have the best medical aid; but that the administration of tapioca, soup, arrowroot, or the like, from his hands, was invariably followed by severe vomiting; while this never occurred when food was administered by her sister. At the last report, the examination was postponed, in order that the result of a chemical analysis, which was being made by Dr. Taylor, might be known.

In the Apothecaries' Hall of Ireland, it is a custom to hold an annual examination of apprentices at the Hall in the first week in May, on some subject in chemical analysis, announced at the commencement of the previous winter session; and a prize of five guineas is awarded to the successful competitor. This year, the subject was "The Inorganic Constituents of Animals and Vegetables: their chemical and physical characters, the changes which they undergo in the organism in health and in disease, and the mode of analysing and detecting their presence." The prize was awarded to Mr. Elliott; and Mr. Burke gained a certificate of honour for distinguished answering.

We desire to direct the attention of our readers to the letter of Dr. Richardson, published at p. 415, and to express an earnest hope that the appeal which he there makes will be cordially responded to. Many in the profession, besides those who had the pleasure of enjoying Dr. Snow's friendship, must have recognised the value of his labours for the promotion of medicine; and we are sure that they will, one and all, not fail to contribute their share towards a simple manifestation of respect for his memory.

The new Parliament, so far as we have been able to ascertain, will contain three medical men, viz., Mr. Brady, member for Leitrim; Dr. Michell, member for Bodmin; and Dr. Noble, member for Leicester. A Dr. Lyons is said to be about to contest the representation of Cork, which has become vacant; but whether he is medical, we do not know. Of the three members already elected, Mr. Brady is one whom we are glad to see in his place again; Dr. Michell has to undergo penance for past misdeeds, and to be thoroughly reformed, before his name can be mentioned with favour by the profession; and it yet remains to be proved of what stuff Dr. Noble is made. The medical profession will have two more members in the newly elected Parliament than the last: yet the number might still be and ought to be greater.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
East York and North Lincoln. [Annual Meeting.]	Hull Infirmary.	Thursday, May 26th, 2 P.M.
South Midland. [Annual Meeting.]	Infirmary, Northampton.	Monday, May 30th, 1 P.M.
Lancashire and Cheshire. [Annual Meeting.]	Town Hall, Chester.	Wednesday, June 8th, 12 noon.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call attention to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

Philip H. Williams, M.D., *General Secretary.*

Worcester, May 1859.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-Seventh Annual Meeting of the British Medical Association will be holden in Liverpool, on Wednesday, Thursday, and Friday, the 27th, 28th and 29th days of July.

President—W. P. Alison, M.D., F.R.S.E., Edinburgh.
President-Elect—James R. W. Vose, M.D., Liverpool.

The Address in Medicine will be delivered by Edward Waters, M.D., Chester, President-elect of the Lancashire and Cheshire Branch.

The Address in Physiology will be delivered by A. T. H. Waters, Esq., Liverpool, Lecturer on Anatomy and Physiology in the Royal Infirmary School of Medicine.

Philip H. Williams, M.D., *General Secretary.*

Worcester, April 26th, 1859.

Reports of Societies.

HARVEIAN SOCIETY OF LONDON.

Edward Hart Vinen, M.D., in the Chair.

Thursday, February 3rd, 1859.

LIGHT THE ONLY CAUSE OF PURULENT OPHTHALMIA OF INFANTS. BY T. BALLARD, ESQ.

After some observations on the frequency of the disease, especially among the poorer classes, and the various degrees of injury to the eyes that resulted from it, Mr. Ballard stated his conviction that the sole cause of the affection was the exposure of the infant to the bright light during the day. He called attention to the circumstance of the distress adults even suffer when their eyes are exposed to a bright light while asleep and on awaking, and to the common practice of obscuring the light from our sleeping-rooms; whereas new-born infants, whose eyes had but just known their natural stimulus, had to sleep and awaken from their slumbers, frequently during the day, exposed to a strong glare of light. This was especially the case among the poorer classes for two principal reasons; 1. Because they live in small rooms, and the bed is consequently near the window, and it was inconvenient to keep the room darkened; 2. Because many were confined in the lying-in wards of public institutions, where it was usual to have white-washed walls, and large and lofty windows without blinds. Cases of ophthalmia occurred also among the higher classes, when the furniture of the room happened to be particularly favourable for the reflection of light, or when the bed was placed directly opposite the window, or, indeed, under any other circumstances which permitted of the infant being exposed continually to the daylight. The generally received doctrine that the disease results from contact with vaginal discharges was disputed; 1. Because the disease did not appear until several days after birth. 2. The author had notes of several cases of extreme leucorrhœa during pregnancy, where the infants had not been affected, the light having been obscured from the lying-in chamber by a green blind. 3. He had notes of other cases where there was no leucorrhœa, and yet the infant suffered with ophthalmia, there being no green blinds to the windows.

The proofs offered in favour of light causing the disease were: 1. The occurrence of it could be prognosticated when the circumstances were favourable for the free exposure of the infant to the light. 2. No cases had occurred where these conditions were prevented. 3. All cases, including some of the most severe, had been cured by obscuration only, no lotion or application of any kind being employed.

The author urged that in all lying-in chambers a green blind should be used, and that it would be a great boon to the poorer classes if, in all public lying-in wards, the upper half at least of the beds were shaded by a green blind, and that when cases of purulent ophthalmia were to be treated, caustics and astringent lotions should be dispensed with, together with that forcible opening of the eyelids, which must be so painful to the infant, and always causes distress in the mind of the parent. The worst cases would recover in a week, if only a green blind were placed before the window of the room in which the infant passed the day.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, April 26th, 1859.

F. C. Skey, Esq., President, in the Chair.

ANEURISM OF THE THORACIC AORTA, OPENING INTO THE TRACHEA AND LEFT BRONCHUS: HÆMOPTYSIS FOUR YEARS AND EIGHT MONTHS BEFORE DEATH: WITH REMARKS ON THE RUPTURE OF ANEURISMS.

BY W. T. GAIRDNER, M.D., F.R.C.P. EDIN.

The subject of the history was a merchant, of robust frame, of more than average intelligence, and who, at the time of his death, was about forty years of age. He was under Dr. Gairdner's care during the latter four years of his life. Ten years before the fatal result, he first complained of pains in the left side and shoulder, which were regarded as rheumatic, and were always relieved by violent exercise. They were, however, unaffected by treatment; and after continuing in very much the same state for more than three years, he was for the first time informed that there was some affection of the great vessels. Pulsation became evident in the following year, and the sputa, though occasionally yellow, were never distinctly blood tinged till the autumn of 1853, when alarming hæmoptysis occurred twice in the same day. After this he submitted to a variety of treatment; and came under the care of the author in April, 1854. He then exhibited every sign of a large aneurism of the aorta, presenting itself in the left front, just under the clavicle, and passing upwards and backwards so as partially to involve the left subclavian. The left pulse was at this time weaker than the right, and in the end became nearly lost. He was directed to take gentle exercise, and partially to resume business, which he had abandoned; to take light nourishing diet, and abstain from medicine; now and then, when the pain was severe, to put on two leeches over the tumour; and to think as little as possible of his complaint, except by way of caution against violent movements. Under this plan his general health improved, but the disease slowly made progress: and he continued to bring up a more or less tinged expectoration—sometimes rusty, sometimes purple,—with only the intermission of a few weeks at most, during the remainder of his life. During the last year he had severe pain, almost like angina pectoris; he lost flesh; had occasional difficulty in swallowing; and brought up blood more copiously, though never in large quantity nor unmixed. At length a small gush of blood, which probably did not exceed nine or ten ounces, occurred, which terminated his life by suffocation in a few minutes.

On *post mortem* examination, the aneurism was found involving the descending aorta from the origin of the left subclavian to the extent of several inches. It lay behind and above the left lung, to which it was firmly adherent. The left bronchus was stretched over the sac, and its posterior wall was absorbed throughout, the coagulated fibrine being freely exposed to view from the interior of the bronchus. Another small opening, with smooth edges, evidently of long standing, existed at the bifurcation of the trachea, and also rested upon firm, solid, laminated clot.

The chief interest of the case consisted in two circumstances —first, the very long period which existed between the occurrence of rupture of the sac and the ultimate fatal event; and secondly, the occurrence of hæmorrhage, in a modified form, at intervals, during the whole of that very long period. The author then discussed the question of hæmorrhage from aneurism generally, pointing out that the case of the late Mr. Liston, recorded in the *Lancet* for December, 1847, was perhaps the first to call the attention of the profession to the possibility of hæmorrhage occurring from this source so long as five months before death, the minor discharges of blood which had occurred being before this time referred to other causes than perforation of the sac. Dr. Gairdner had been able to trace nine or ten instances only in which severe hæmorrhage was recorded to have occurred more than one month before death, and only one exceeding the period in Mr. Liston's case—namely, a preparation in Guy's Hospital, pointed out by Dr. Sibson, in which the patient had severe hæmoptysis seven years before death. It happened to the author, some years ago, to be able to place on record another instance, in which an aneurism of the superior mesenteric artery had given rise to hæmorrhage from the bowels twenty-two months before the patient's death. (*Monthly Journal of Medical Science*, vol. x, p. 83.) Dr. Gairdner recited cases in which aneurisms, opening externally, had ruptured, and given rise to very severe hæmorrhage at long intervals before death. One was communicated to Mr. Syme (*Monthly Journal of Medical Science*, vol. x, p. 89), where the man lived four months, and died of typhus fever. Another was recorded by Dr. Stokes (*Diseases of the Heart and Aorta*, p. 82), in which frequent hæmorrhages took place during a year, after which the tumour became dense and hard, the cough and dyspnœa abated, and three weeks after the last attack, the patient left the hospital, saying that "he felt quite well." Dr. Gairdner attributed the minor hæmorrhages, in almost all cases, to rupture of the sac; and this cause of hæmorrhage was very apt to be overlooked when it amounted to no more than an inconsiderable leakage, which might last for weeks, or even months. He described four varieties of hæmoptysis likely to occur, and endeavoured to associate them with differences in the site and relations of the tumour, and the changes occurring in the lung structure. These he characterised as being very rarely of an inflammatory character, but more commonly either of the nature of collapse from pressure on a bronchus, or of chronic infiltration of blood directly, or indirectly, from the aneurism. He called in question the explanation usually given of these minor hæmorrhages, that they are produced by venous congestion—1st: because, when pressure on a vein has occurred, hæmorrhage has almost always been associated with direct pressure of the aneurism on the trachea or bronchi; 2ndly, because, in his experience, some of the most characteristic cases of slight and continuous hæmorrhage had been from aneurisms in which no pressure on the pulmonary veins was possible. He would not venture to assert that blood in the discharges of a patient affected with aneurism *always* indicated the communication of the sac with a mucous membrane, but he believed it generally did so, more especially when hæmoptysis occurred, if the aneurism pressed on the trachea, and if it were unaccompanied by indications of pulmonary change.

Dr. Gairdner next pointed out the great importance of this conclusion, with reference to diagnosis in obscure cases. In aneurisms characterised chiefly or exclusively by laryngeal symptoms, it was often extremely difficult to arrive at a satisfactory conclusion as to the cause of the very distressing dyspnœa. In this class of cases, the repeated presence of even small quantities of blood in the sputum was a most valuable means of diagnosis; for if there were laryngeal dyspnœa and stridulous respiration, if the epiglottis were not thickened, if the mucous membrane of the larynx, so far as it was within reach of the finger, were sound, and if with these signs, positive and negative, there were a persistent tendency to even the slightest amount of blood in the sputum, while auscultation and percussion gave negative results, both as regards the lungs and heart, aneurism might be predicated with as much certainty as was possible without the physical signs of tumour. Further, such an aneurism might be assumed to be small, arising from the back part of the arch, or from the commencement of the innominate artery, and so placed as to entangle either the left or the right recurrent nerve. He concluded his communication by some remarks on a case which, he thought, exemplified the mode in which these minor hæmorrhages usually occurred. Five or six papillary eminences marked the surface of the trachea where its wall was thinned by pressure of the aneurism, and on each of these, distinct pale orifices existed, only one of which was actually perforated; and the discharge of blood had been in this case very inconsiderable.

Dr. Sibson assented to the position laid down as to the value of hæmoptysis and stridulous breathing as diagnostic of aneurism of the descending aorta. In one-fourth of the cases of aneurism which he had collected there was hæmoptysis; in another fourth, stridulous breathing. He thought these symptoms were more frequently connected with aneurism of the descending arch, than of any other part of the aorta. The dyspnœa might not depend always on pressure on the recurrent nerve; but sometimes on pressure of the pneumogastric: the latter would act constantly in producing dyspnœa, the former only occasionally, as during speaking, coughing, etc.

Dr. Markham mentioned a case of aneurism, indicated by physical signs and the expectoration of large quantities of blood, which had occurred in a porter of St. Mary's Hospital, who had been employed in most laborious work. The hæmoptysis took place three or four years since; but the patient had recovered completely, and was now in the artillery.

Dr. Sibson had no doubt that this was a case of aneurism; but not, he thought, of the descending aorta.

Dr. GAIRDNER had inspected the preparation in Guy's Hospital to which he had referred in his paper. He saw no reason to doubt that this was a case of aneurism which had existed seven years after the occurrence of hæmoptysis. The woman was 54 years of age, and was a patient of Dr. Bright. She was subject to palpitation, and to pain between the shoulders. The report of the case did not state how much hæmorrhage there had been six or seven years before. There were no tubercles in the lungs, nor disease of the heart. The point of his (Dr. Gairdner's) paper, was to shew that the occurrence of persistent but not great hæmoptysis, with stridulous breathing, was a diagnostic mark of the existence of aneurism. When such symptoms were present, and the lungs and heart were sound, it might be almost positively concluded that aneurism was present.

POPLITEAL ANEURISM SUCCESSFULLY TREATED BY FLEXION OF THE KNEE-JOINT. BY ERNEST HART, ESQ.

[*Communicated by* ALEXANDER SHAW, ESQ., *Treasurer.*]

J. S., aged 41, consulted Mr. HART in September 1858, having an aneurism in the right ham. It was globular, of the size of a small apple, and situated at the lower and outer part of the popliteal space. It had a full beat, but was not very near the surface. Placing the patient on the sofa, and baring the leg in order to make a careful examination of the tumour, Mr. Hart found that its pulsation was affected by the angle at which the leg was bent upon the thigh; and that, when very complete flexion was effected, its thrill almost wholly ceased. Concluding that in this position the course of the blood through the tumour was greatly retarded, he conceived the hope of effecting the cure of the aneurism by the deposition of active clots, if the leg could be retained for a sufficient length of time in the bent position. After a week's preliminary rest, treatment was commenced by bandaging the leg from the foot to the knee (not covering the tumour), thoroughly flexing the leg on the thigh, and retaining it in that position by the application of a stout roller. The patient was a thin, wiry man, and the flexion produced no inconvenience to him at the time. He passed a better night than during the previous week, when severe pain had been present in the aneurismal sac. What pain or annoyance was complained of during the treatment, was referred to the knee-cap, but it was very trifling, and "barely deserving to be called pain". The tumour was examined on the morning of the third day (about forty hours after flexion was enforced), and considerable solidification had occurred. On the fifth day, the tumour was hard and solid, and neither pulsation nor thrill could be detected. The leg was lightly attached to the thigh at a right angle. On the seventh day, the patient was allowed to move about, the foot being slung. On the twelfth day, the leg was completely straightened, and the patient walked on it with ease, limping from stiffness at the knee-joint consequent upon confinement. Six weeks subsequently, the tumour was hard and firm, and much smaller. After three months, it was barely perceptible, and there was pulsation in that part of the artery. The patient was seen at various stages by the author's friends, Mr. White Cooper, Mr. Coulson, Mr. Holmes of St. George's Hospital, Mr. Flower of Middlesex Hospital, and Mr. Buxton Shillitoe.

The treatment by flexion in this case was perfectly and immediately successful. It was unattended with any difficulties, it offered no inconveniences, and was not followed by any other than satisfactory results. The case, however, was one particularly well suited for the essay of such a plan of treatment. The patient was not stout, which renders flexion difficult; nor was he aged, which makes it painful. The tumour was of average size and of average prominence; when the knee was bent, the aneurismal sac was below the line of flexure. Cure was evidently effected in this method by the retardation of the current of blood, and the consequent deposition of active clots in the sac—the only manner in which satisfactory cures could be anticipated. This result was probably effected by the combined influences of pressure on the sac by the surrounding fascial and muscular tissues, and acute flexion of the artery. In so far as it was due to pressure, it appeared to be a return to the old method of treatment by direct pressure, but was free from the inconveniences of the screw and pad, which were open to the reproach of occasioning gangrene of the skin, rupture of the sac, and other accidents. Its simplicity and its success in this case appeared to strongly recommend it for further trial. If it were not always successful, there was not any other method free from the same objection; and there seemed reason to hope that the principle might admit of efficient application to a number of cases in which aneurismal tumours were developed opposite to the joints of the limbs.

POPLITEAL ANEURISM SUCCESSFULLY TREATED BY CONTINUED FLEXION OF THE KNEE-JOINT. BY ALEXANDER SHAW, ESQ.

This communication consisted of the narrative of a case of popliteal aneurism, cured by continued flexion of the knee-joint, according to the method described in the preceding paper by Mr. Hart.

The patient, aged 30, first perceived a pulsating tumour in the left ham a week before his admission into the Middlesex Hospital. It was of the size of a lemon, occupied the centre of the popliteal space; was easily compressed; the pulsation was strong, and there were other signs of its being a recent aneurism. On December 1st, the knee was secured in the bent position by a band brought round the foot and thigh, and fixed near the hip. The immediate effect of the flexion was that the patient ceased to feel the beating of the tumour, and that on inserting the oiled finger into the flexure behind the knee no pulsation could be discerned. On the fourth day, when the limb was unbound, the tumour was found to have lost about a third of its original size; its walls were thicker and denser, the force of the pulsation was considerably diminished, and the sac had receded more deeply into the popliteal cavity. Gradual improvement continued to take place. Between the third and fourth week from the commencement of the treatment, the sac had become greatly reduced in size; its walls appeared nearly solid, and the pulsation was so faint that it was expected at each day's visit to find it extinct. The treatment was varied by occasionally undoing the strap, which confined the knee, for several hours together; but, owing to the stiffness caused by the long continuance of the flexion, the position of the joint was not much altered by the relaxation. It was not till the thirty-eighth day that the pulsation in the tumour altogether ceased. The sac was at that time about the size of a walnut. The patient gradually recovered the power of extending the joint. On the fiftieth day, he could walk with only a slight halt, and on the fifty-sixth day he was discharged. During the first ten days, the patient complained of the pain, as well as the irksomeness, of keeping his knee constantly bent; and for a slight swelling of the joint, a lead lotion was applied. Afterwards, he made light of the inconvenience, and he never at any time asked to have the belt relaxed.

At the close of the case, the author offered a few brief remarks on the principle on which the cure was effected; and, in illustration, added the observation that, by extreme flexion of the knee-joint of a sound limb, the force of the current of blood through the popliteal artery can be weakened to such a degree as to cause stoppage of pulsation in the tibial arteries.

Mr. FERGUSSON regarded the proceeding described by Mr. Hart as a valuable addition to the practice of surgery. He spoke of the value of pressure generally in the treatment of aneurism, and also of "manipulation,"—modes of treatment which he thought would set aside, in many instances, the necessity for the knife. In the plan pursued in the cases before the Society, there might be failures, but this was no reason why we should discard the operation; but should rather encourage us to persevere, to determine the real value of the proceeding. The plan was not altogether novel, for it had been tried three or four years since in King's College Hospital. One of his house-surgeons had ascertained, in a case of popliteal aneurism, in a man aged 60, that when the leg was flexed upon the thigh, the pulsation in the tumour ceased. The aneurism was of the size of the fist, and was treated by pressure in the groin, and by flexure of the leg upon the thigh. This was persevered in for some time, but without benefit. The man, being impatient of treatment, left the hospital, and died of some other disease. To show the influence of position in certain cases of aneurism, he related a case of that disease in the politeal space, in which the employment of pressure gave encouraging, but tardy, results. It was found in this case that on extending the leg to its full degree, after the employment of pressure, all pulsation in the tumour ceased.

Mr. BIRKETT briefly referred to three cases of aneurism, treated by pressure, which had come under his notice in Guy's Hospital. In one case, ordinary pressure in the groin was applied; then pressure by flexion. Neither did good; but it must be admitted that they were not fairly tried. The femoral artery was afterwards tied, and the patient recovered In the second case, ordinary pressure was applied, at first with success; but suddenly the tumour became much enlarged, the femoral was tied, and the patient did well. In the third case, the patient, a young man, had an aneurism in the right popliteal space.

Pressure was tried, and in fourteen days he appeared well. The tumour contracted, and felt like a small hard ball. Flexion was then resorted to, but not persevered in, and ordinary pressure was again employed. The aneurism, however, gave way, and the femoral had to be tied. The man subsequently had a small aneurism in the left popliteal space: he would not submit to flexion, so the femoral vessel was secured.

Mr. Savory said that these cases were specially interesting and instructive in their relation to the physiology of the blood-vessels. It was familiarly known that a transverse wound of an artery gaped widely, and that when an artery was completely divided, the ends retracted. Yet these important facts had seldom received more than a passing notice. They had never been explained. To what was this retraction due? The muscular tissue was in no way concerned in it; for it occurred at a long period after death, as well as during life. Neither would elasticity alone explain it. Another condition was required, and that was tension. The arteries were elastic tubes, always tense; so that, when divided, by no management of posture or position could the retracted ends be brought into apposition. The extent of their retraction was a measure, then, not of their elasticity, but of their tension. This constant state of tension was obviously connected with their purpose; by it their patency, under every variety of movement and position, was secured. But this rule had its exceptions, and these were to be found at the knee and elbow-joints. At these parts, when an artery was divided, extreme flexion would bring their ends into apposition; but in this position, and for this very reason, the course of the vessel was interrupted; the course of the blood through it was impeded; the pulse ceased in the limb beyond. Thus, he conceived, was explained the principle upon which the cure of aneurism by this means was accomplished. It was not due to pressure, in the sense in which that term had been employed. It was due to the fact that the circulation through the artery at a short distance on the distal side of the sac was arrested; so that, as far as the principle was concerned, it would probably succeed, whatever part of the popliteal space the aneurism occupied. Now, in connection with this interesting fact—the arrest of the current through the artery by extreme flexion of the limb—Mr. Nunn, in some observations on the arrangement of the arteries of the limbs, recently published, had alluded to the remarkably free anastomosis which existed around these joints. They were clearly for the purpose, as he said, of compensating for the occasional interruption through the main channel. He (Mr. Savory) added, that this plan of treatment appeared free from one grave objection to the ordinary treatment by compression—namely, of interfering with the venous circulation. For although, in extreme flexion, the current through the main vein was interrupted also, yet here there was also an abundant superficial venous anastomosis around. The veins, like the arteries, were elastic, and, to say the least, were equally tense.

Editor's Letter Box.

INSTRUMENT FOR APPLYING DROPS TO THE CONJUNCTIVA.

Letter from J. C. Savery, Esq.

Sir,—Will you permit me to call the attention of those interested in the treatment of diseases of the eye to a little instrument I have found very useful in applying drops to the conjunctiva; it consists of a glass tube, three inches long and about one-eighth of an inch bore, and the ends fused, to take off the sharp edges. Attached to one end of the tube is a flat India-rubber bulb, by compressing which, and dipping the free end of the tube into the solution, the tube is filled, and by again compressing the bulb, the drop is thrown into the eye. The advantages I believe to be possessed by this instrument over the scoop and brush are: 1, its greater cleanliness; 2, the power of exactly adjusting the quantity of drop wished to be used; and, 3, the retaining the drop in the tube until the eye has been exposed, without danger of its being thrown over the child's clothes or your own, if treating one resenting the application of the remedy.

The tube and bulbs may be obtained from Messrs. Baker, Holborn. I am, etc. J. Charles Savery.

Surgeon to the Hastings Dispensary.

Marina, St. Leonard's, May, 1859.

LARA AND WALTERS *v.* WARD.

Letter from T. Ogier Ward, M.D.

Sir,—As you have published a report of the above trial, which, owing to the plaintiffs' case having broken down, went no farther than their counsel's version of it, and is calculated, if uncontradicted, to injure my character as a man of honour, I shall feel much obliged by your inserting the following statement of facts, which would have appeared in evidence, had my defence been called for. On the 24th of February, Dr. Williams was introduced to me by Mr. Orridge, medical agent, and we negociated together, at several interviews, for the sale of my practice.

On the 4th of March, Dr. Williams for the first and only time saw Mr. Lara, who mentioned my practice; but on Dr. Williams saying that he already knew the particulars, and had declined purchasing on my terms, he gave him an introduction to another party.

On the 12th of March, having come to the resolution not to sell my practice, I withdrew it from the hands of all the agents I had employed: Mr. Orridge, Mr. Bowmer, the plaintiffs, and others. But Dr. Williams having subsequently renewed negociations, and come to terms with me, I felt Mr. Orridge was entitled to the commission, which I accordingly paid him.

When I received the plaintiffs' extraordinary demand for commission, I stated the above facts in a letter to them, which their counsel handed in in evidence. On the judge reading it, their case broke down.

I shall be content, if you will kindly make this statement public, to leave it to the profession to judge whether I was not justified in honour, as well as in law, in resisting a demand for commission made under such circumstances.

I am, etc., T. Ogier Ward.

Kensington, May 1859.

FORCEPS PRACTICE.

Letter from W. Tyler Smith, M.D.

Sir,—You have mentioned my name in your leading article of last week, in commenting upon a case of malpraxis; and I therefore feel bound to remark upon the assertions and conclusions contained in the last paragraph of the article in question.

Surely it is illogical to draw any argument against the employment of the midwifery forceps from the fact that a drunken man had, in a particular case, used them improperly; yet, remarking on this case, you declare it to be "the duty of the profession at large to bring its opinion to bear strongly" upon what you fear to be "the growing and indiscriminate use of the forceps in labour". You add, that you "have no doubt whatever that this instrument is very largely used without any necessity". It is as much proved as any fact in obstetrics, that the forceps is less used in Great Britain than in any other country having pretensions to a scientific midwifery. The forceps is resorted to in France and Germany more than twice where it is used once in British practice. It is, indeed, a common reproach to us on the continent of Europe and in America, that we neglect the employment of the forceps.

You observe, "Many a skilful man may go through a long life without finding any ill effects arise from the use of the forceps; but the bungler comes next day, and sacrifices a life—it may be two—with his needless fumbling." This is no argument against the use of the forceps, but against the abuse of the instrument. Raise obstetric education, if you will; but do not assail the greatest invention ever made in midwifery, because drunken men and bunglers make it an instrument of mischief.

The assertion of "your belief that far more children are sacrificed by the use of the forceps, than of the other apparently more formidable weapon" (*i. e.*, the perforator), must strike all accoucheurs. The midwifery forceps is so constructed, that it is absolutely almost impossible to kill a child with it, during labour. I am, etc., W. Tyler Smith.

7, Upper Grosvenor Street, W., May 19th, 1859.

[Our observations arose entirely out of the cases of M'Hugh and Thackeray. We meant only to protest against the use of the forceps in natural cases, for the purpose of saving time to the practitioner. We had no intention of pronouncing any opinion other than favourable, as to the substitution of the forceps, turning, and the induction of premature labour, in place of craniotomy, in difficult cases, as proposed by Dr. Tyler Smith. Editor.]

THE LATE DR. JOHN SNOW.

Letter from B. W. Richardson, M.D.

Sir,—A few professional friends have been kind enough to join with me in undertaking to place in the Brompton Cemetery, a plain but durable monument over the grave of the late Dr. Snow, as a last and fitting memorial of the esteem in which he was held by those of his professional brethren who had the pleasure of his friendship.

Having ascertained that such mark of remembrance would be congenial to the feelings of Dr. Snow's relations, I take the opportunity of making the project widely known through your columns, feeling sure that a great many members of the medical body will be glad to co-operate in paying this simple tribute to the memory of our late estimable and distinguished brother in science.

A committee will be organised shortly to carry out this object to completion; meanwhile, subscriptions for the memorial may be forwarded to Dr. Hawksley, 26, George Street, Hanover Square, or to myself. I am, etc.,

B. W. Richardson.

12, Hinde Street, May 18, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Bristowe. On May 17th, at 3, St. Thomas's Street, Southwark, the wife of J. S. Bristowe, M.D., of a daughter.

Cholmeley. On March 8th, the wife of Henry Cholmeley, M.D., Staff-Surgeon, Rangoon, of a son.

Coates. On May 16th, at 10, Circus, Bath, the wife of *C. Coates, M.D., of a daughter.

Collyns. On May 16th, at Moreton Hampstead, Devon, the wife of G. N. Collyns, Esq., Surgeon, of a son.

Fleming. On May 16th, at Holbrook, Suffolk, the wife of Albert Fleming, Esq., Surgeon, of a daughter.

MARRIAGES.

Blake—Ainsworth. Blake, Charles Paget, M.D., of Beulah, Torquay, to Mary, daughter of the late William Ainsworth, Esq., of Birkett's Bank, near Wigan, at Kimbolton, Hunts, on May 12th.

Chalmers—McEwen. Chalmers, William Kelman, M.D., 2nd Battalion 19th Regiment, to Eliza Crichton, eldest daughter of the late David McEwen, Esq., of Westfield, Dundee, at All Saints, Knightsbridge, on April 6th.

Locock—King. Locock, Sidney, Esq., Attaché to Her Majesty's Legation at Constantinople, fourth son of Sir Charles Locock, Bart., M.D., to Abbie, third daughter of the Rev. Jonas King, D.D., at Athens, on May 5th.

DEATHS.

Floyer. On May 12th, at 144, Bishopsgate Street Without, Herbert Henry, son of C. A. Floyer, M.D., aged 7 months.

Galen. On May 11th, at Aberdeen, Ann, fourth daughter of John Galen, M.D., aged 16.

Jeston. On May 9th, at Malmesbury, Robert Charles Humphrey, eldest son of *Alfred W. Jeston, Esq., Surgeon, aged 16.

Jones, Charles, Esq., late Surgeon H.E.I.C.S., at Brompton, aged 73, on May 7th.

Proudfoot, Thomas, M.D., at Kendal, aged 68, on May 14th.

Seymour. On April 3rd, on board the *Nemesis* steamship, in his return to England, Lieutenant-Colonel Seymour, H.M. 84th Regiment, aged 38, eldest surviving son of E. J. Seymour, M.D., of Charles Street, Berkeley Square.

PASS LISTS.

Royal College of Surgeons. The following gentlemen, having undergone the necessary examinations in Anatomy and Physiology at meetings of the Court Examiners, on May 3rd, 4th, and 7th, will be admitted to the pass examinations when qualified; viz.—

King's College.

Brown, John Barr
Bubb, John
Coalthrop, Edward
Jeffery, Edward
Long, Robert Godolphin
Pout, Frank
Sansom, Arthur Ernest
Workman, Charles John

Middlesex Hospital.

Birch, George
Fowler, Francis Baker
Landsberg, J. P. Von
Langdon, John

University College Hospital.

Bastian, Henry Charlton
Corin, William John
Gibson, Francis William
Sheldon, Thomas

Guy's Hospital.

Lomas, Henry Wright
Major, George Aylwin
Owens, Henry
Wise, William Clunie

St. Thomas's Hospital.

Pembrey, Thomas
March, Henry Colley
Williams, John

St. Bartholomew's Hospital.

Cotton, Thomas
Haslam, George Herbert
Menzies, James Irvine

London Hospital.

Davey, Edward Myhill

Westminster Hospital.

Wallis, Albert William

St. George's Hospital.

Blenkinsop, William Henry

Manchester School.

Barr, Joseph Henry
Emmett, William Henry
Jones, William Owen
Roberts, Edward Stokes
Stanfield, William

Birmingham School.

Iliffe, Robert
May, Henry
Overton, Arthur
Waterson, John

Edinburgh.

Jameson, George William
King, J. H. C. Elliott
Racey, John

Dublin.

Alcock, Daniel
Kynsey, Josiah Frederick
Stafford, Patrick Walter

Newcastle-on-Tyne School.

Pyburn, James
Watson, John

Leeds School.

Foster, John
Mann, David

Glasgow School.

Griffith, Samuel

Sheffield School.

Hall, Marriott

University of St. Andrew's. List of gentlemen on whom the Degree of Doctor of Medicine was conferred on May 6th, 1859:—

Adcock, John, M.R.C.S., Guy's Hospital
Allen, David John, M.R.C.S. and L.A.C., Carmarthen, South Wales
Bainbridge, William, M.R.C.S. and L.A.C., London
Baker, Thomas H., F.R.C.S.I., Lic. King and Queen's Coll. Phy., Ireland, Parsontown
Bancroft, Joseph, M.R.C.S. and L.A.C., Stretford, near Manchester
Barber, Henry, M.R.C.S.Ed., Eastwood, Nottingham
Bird, George, M.R.C.S., London
Blest, Samuel B., M.R.C.S.I., Dublin
Bullmore, William K., M.R.C.S. and L.A.C., Falmouth
Conran, Charles G., Madras
Cooke, William B., M.R.C.S. and L.M., Gloucester
Cordwent, George, M.R.C.S. and L.A.C., Taunton
Craddock, William, M.R.C.S. and L.A.C., Her Majesty's Bengal Army
Drysdale, Charles R., M.R.C.S., London
Fergusson, Andrew, M.R.C.S.Ed., Dumfriesshire
Garstang, Walter, M.R.C.S.Ed., Blackburn, Lancashire
Gill, John B., M.R.C.S. and L.A.C., London Hospital
Griffith, John T., F.R.C.S. and L.A.C., Peckham, Surrey
Hadden, Henry R., M.R.C.S.I. and L.A.C., Wexford
Henderson, James, M.R.C.S.Ed., Aberdeenshire
Hewitt, Frederick H., M.R.C.S. and L.A.C., Clapham, near London
Horrocks, John, Lic. Phy. and Surg. Glasgow, Bolton, Lancashire
Howitt, Francis, M.R.C.S. and L.A.C., Heanor, Derbyshire
Kinahan, John, M.R.C.S.I., Staff Assistant-Surgeon, Army

Kirkman, William P., M.R.C.S. and L.A.C., Melton, Woodbridge, Suffolk
La Fargue, George F. H., M.R.C.S. and L.M., London
Lindsay, James M., M.R.C.S.Ed., Edinburgh
Lynes, William, M.R.C.S. and L.A.C., L.M., Wednesbury, Staffordshire
Mott, Charles G., M.R.C.S. and L.A.C., London
Mott, Marcus W., M.R.C.S., Her Majesty's Bengal Army
Parker, Thomas D., M.R.C.S., L.A.C., and L.M., Sevenoaks, Kent
Roberts, David Lloyd, M.R.C.S. and L.A.C., Manchester
Smith, Charles Edward, M.R.C.S. and L.A.C., Army Medical Staff
Smith, Frederick H., M.R.C.S., L.A.C., and L.M., Blackheath Road, Greenwich
Soulby, Henry, M.R.C.S. and L.A.C., Spilsby, Lincolnshire
Tizard, Henry, M.R.C.S. and L.A.C., Weymouth, Dorset
Vintras, Achille, M.R.C.S., St. Mary's Hospital, London
Woolfreys, John A., M.R.C.S. and L.A.C., 6th Battalion Military Train
Wotton, Charles, M.R.C.S. and L.A.C., King's Langley, Herts
Yarde, William, M.R.C.S. and L.A.C., London

Apothecaries' Hall. Members admitted on Thursday, April 28th, 1859:—

Abbey, Walter, Wellingborough
Aubin, Frederick George, London
Barrett, Charles Albert, Kingston, Berks
Blackman, Charles Thomas, London
Corbet, Rea, Orsett, Essex
Harley, Thomas, Cleobury Mortimer
Heath, William Ravenscroft, Manchester
Hellicar, Charles Joseph, Clifton, Bristol
Hocken, Thomas Morland, Dublin
Howe, John, Marple, near Stockport
Kennard, David, Lambourne, Berks
Mercer, Arthur Wyatt, West Drayton
Procter, William Birket, Kirby Lonsdale
Sawkins, William, London
Taylor, William Henry, London
Tiffen, Robert, Wigton, Cumberland
Tylecoate, John Horton, Great Heywood, Staffordshire

At the same Court, the following gentlemen passed their first examination:—

Griffith, Samuel, Tremadoc
Waring, William, Brixton

Thursday, May 5th:—

Mackenzie, Walter Fawkes, Wigan, Lancashire
Roberts, Charles, Darlington
Smith, Eustace, Leamington
Smythe, William Dumville, Richmond, Surrey
Thompson, Samuel, Knottingley, Yorkshire
Woodward, Martin, Pershore, Worcestershire

The following gentlemen also, on the same day, passed their first examination:—

Caudle, Adolphus William Wisden, Henfield, Sussex
Michell, Thomas, Redruth, Cornwall
Smith, Gordon Sydney R. W., Princes Terrace, Caledonian Road

Thursday, May 12th:—

Barber, Henry, Eastwood, Nottinghamshire
Cribb, John, London
Gover, Robert Mundy, Andover, Hants
Langford, Samuel Charles, Higham, Norfolk
Martin, Henri Ferdinand Theophile, Gaudens, France
Waring, William, St. Ann's Terrace, Brixton Road
Wood, William Peacock, Ashton-under-Lyne

At the same Court—

Howse, William, Burford, Oxfordshire, passed his first examination.

HEALTH OF LONDON:—WEEK ENDING MAY 7TH, 1859.

[From the Registrar-General's Report.]

The total deaths in London, which were 1207 in the last week of April, declined to 1108 in the week that ended last Saturday. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 1060; but as the deaths returned for last week occurred in a population which has increased, they should be compared with the average raised in proportion to that increase; namely, with 1166. The comparison shows that the deaths that occurred last week were less by 58 than the number which would have been returned if a rate of mortality equal to the average for the first week of May had prevailed.

The births registered last week exceeded the deaths in the same period by 795.

Small-pox, which had been fatal in about sixteen cases in each of the three previous weeks, was fatal in twenty-six cases last week. Fourteen of these occurred in the east districts, chiefly in Bethnal Green. Scarlatina and diphtheria still maintain a high rate of mortality; the deaths from the two complaints last week were 69. Fourteen of these are referred to diphtheria, and occurred as follows:—one at 17, Victoria Place, Paddington; one at 33, Westbourne Terrace; one at 9, Queen Street, Brompton; one at 4, Carey Street, Westminster; one at 7, Grace Street, Islington; one at Helmsley Terrace, Hackney; one at 1, George Street, Hackney; one at 5, Miles Place, Finsbury; one at 283, Bethnal Green Road; one at 64, Wootton Street, Lambeth; one at 10, James Street, Kennington; one at 9, Manley Place, Kennington; one at 13, Charles Street, Peckham; and one at 4, Craven Place, Old Kent Road.

By comparing the results of the last two weeks, it will be seen that the decrease in the total mortality to the extent of nearly 100 deaths, as shewn above, arises from a reduction more or less under each of the five classes in which all diseases are arranged:—the deaths referred to zymotic diseases declined from 278 to 258; those caused by "constitutional diseases", from 274 to 243; those by "local diseases", from 480 to 458; those by "developmental diseases", from 131 to 108; and those by violence, from 39 to 34. These 34 violent deaths were all from accident or negligence, except two, which were cases of infanticide. Amongst the causes of death, is mentioned a case of porrigo, which was fatal to a child after four months illness; and a boy, of six years, died from "the effects of a stone lodging in the larynx, and an operation for the removal of it."

Last week the births of 956 boys and 947 girls, in all 1903 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1645.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·775 in. The extreme variation of readings was from 29·59 in., on Wednesday, to 29·94 in., on Friday. The mean temperature of the week was 48·5°, which is 2·9° below the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was below the average until Saturday. The thermometer in the shade fell to its lowest point, 33·1°, on Friday, and rose next day to its highest, 72°. The entire range in the week was therefore 38·9°; the mean daily range was 21·9°. The difference between the mean dew-point temperature and air temperature was 8·7°. The mean degree of humidity of the air was 72; complete saturation being represented by 100. The mean temperature of the water of the Thames was 50·5°. The wind blew from the north-east till Thursday afternoon; it then changed to south-east; and on the afternoon of Saturday was in the south-west. No rain fell during the week.

WEEK ENDING MAY 14TH.

The deaths registered in London, which were 1,207 in the last week of April, and 1,108 in the first week of May, show a further decrease for the week ending last Saturday, when they were 1,070. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 1,051; but as the deaths that are returned for last week occurred in a population which has increased, they can only be compared with the average raised in proportion to that increase, namely, 1,156. From these figures, it appears that the deaths that occurred last week were less by 86 than the number that would have occurred if the average rate of mortality for the second week of May had prevailed.

From zymotic diseases in the aggregate 214 deaths occurred last week; the average, corrected for increase of population, is 257. The deaths referred to phthisis or consumption number 163; the corrected average is 157. Those referred to other pulmonary complaints are 154, the average being 192. Small-pox carried off 18 persons. The deaths from scarlatina and and diphtheria together declined from 69 in the previous week to 60 last week. Thirteen cases, in which diphtheria is recorded as the fatal disease, occurred as follows:—one at 2, Brompton Place, Brompton; one at 1, Clara Cottages, Hammersmith; one at 21, Lillington Street, Westminster; one at 19, Durham Terrace, Agar Town; one at 17 A, Ann's Place, Hackney Road;

one at 28, Backchurch Lane, Goodman's Fields (where two other deaths have occurred, within seven days, from scarlatina maligna, and where there is a large accumulation of dung, frequently smelling offensively, near the back of the house); one at 13, Royal Mint, Aldgate; one at 5, Lemon Street, St. Saviour; one at 12, Vine Terrace, Lambeth; one at 8, Moor Place, Lambeth; one at 7, Cumberland Row, Kennington; one at Fernside, Wandsworth Common; and one at 1, Dennett Terrace, Queen's Road, Deptford.

Two boys, aged respectively 3 and 6 years, and a girl, aged 8 years, the children of a journeyman blacksmith, died, all on the 7th inst., in Brewhouse Lane, Putney, from "typhus, following measles." Another child died, also in the same family, very recently. The typhoid symptoms were well marked in three of the four cases, and set in some days after the children had apparently recovered from measles. The house occupied by the family is in a most unsatisfactory state, from defective drainage and other causes.

A woman, aged 82 years, died at 25, Goulston Court, Whitechapel, from want of food and exposure to the night air.

Last week the births of 993 boys and 823 girls, in all 1,816 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1,593.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·024 in. The mean daily reading was above 30 in. on four days of the week. The extreme barometrical variation was from 29·86 in. to 30·13 in. The mean temperature of the week was 51·2°, which is 0·3° below the average of the same week in 43 years (as determined by Mr. Glaisher). The *lowest* temperature was 38·0°, on Monday; the *highest* 67·5°, on Wednesday. The entire range of the thermometer, in the shade, was therefore 29·5°. The mean daily range was 22·4°. The difference between the mean dew-point temperature and air temperature was 7·5°. The mean degree of humidity of the air was 76. The mean temperature of the water of the Thames was 53·8°. The wind blew almost constantly from the north-east. No rain fell except on Sunday, when the amount was 0·30 in.

LONDON MEDICAL REGISTRATION ASSOCIATION.

THE sixth of the meetings convened by this Association in different districts of the metropolis took place on the evening of Saturday, May 7th, in the theatre of the Literary and Scientific Institution, Edwards Street, Portman Square. Mr. Propert, Vice-President of the Association, took the chair. He was attended on the platform by the Treasurer, Mr. Bottomley, and many other members of the Committee of Observation. Dr. LADD, Hon. Secretary, read the Report of the Proceedings of the Association.

Mr. GUY, of Dorset Square, moved the first resolution, which was seconded by Mr. GERRANS, of Wyndham Place, and carried unanimously—

"That this meeting, having heard the report of the progress hitherto made by the London Medical Registration Association, thoroughly acquiesces in the principles by which the course of that Association has been guided, and recognises the importance of its receiving the support of all qualified medical practitioners in the borough of Marylebone."

Mr. BOTTOMLEY remarked, that they were greatly honoured by the presence of Mr. Propert. Few men could have done what he had, and his active support of this Association greatly entitled it to general encouragement. He hoped that the endeavour would be made to render the Association a powerful body, so as to have influence both with the Medical Council and the Government, to the extent of rendering the Medical Act hereafter perfect.

Mr. NUNN knew that the sons of some notorious illegal practitioners had become qualified, and had registered, and that their fathers practised under cover of the sons' names. What power had the Association, the Medical Council, or the Government, over them in virtue of the Act?

Dr. LADD stated that if a man were duly qualified, unless any gross case of immoral conduct were proved against him, he (Dr. Ladd) apprehended that the Registrar could not legally refuse his admission upon the register.

Mr. C. CLARK could not consider such a proceeding as that of one person practising with the diploma of another as otherwise than immoral conduct, involving in such cases as those instanced, a complicity on the part of the qualified man, and therefore coming under the cognizance of the institution to which the latter belonged. Mr. Clark suggested that the names of all such persons should be given to the Secretary of the Association, in order that they might be communicated to the institutions to which they belonged.

The CHAIRMAN warmly urged upon the meeting the suggestion of Mr. Clark.

Dr. WILLIS, of Kensington, moved the second resolution; "That in the opinion of this meeting it is highly desirable to augment the number and influence of the members of the London Medical Registration Association, so as to enable it effectually to carry out its objects, and to give weight to its proceedings with the Medical Council; and this meeting pledges itself to use every exertion to secure that end."

Dr. THORN seconded the resolution.

Mr. CLARK did not think that the Council could be a prosecuting body; it was appointed for a specific object, and was not empowered to go beyond that; but he trusted that the profession would actively sustain this Association, and enable them to extirpate the harpies which take hundreds of thousands of pounds out of the pockets of the profession. He proposed the third resolution, which was seconded by Mr. Ballard;—"That this meeting recognises the exceeding importance of obtaining, and submitting to the London Medical Registration Association, all possible information concerning persons practising medicine illegally in the borough of St. Marylebone and its vicinity, both by the individual efforts of all present, and, if advisable, by the formation of an independent committee of practitioners in the neighbourhood."

Dr. KIRBY moved the fourth resolution, which was seconded by Dr. HARLING, and unanimously carried;—"That this meeting, having heard with great satisfaction of the success which has attended the efforts of the London Medical Registration Association in putting down the notorious Bennetts, considers it highly desirable that the means of the Association should be enlarged by liberal contributions to the prosecution fund, believing that the prosecution of quacks would be beneficial to both the profession and the public."

A vote of thanks to the Chairman, proposed by Dr. THORN, seconded by Mr. BOTTOMLEY, terminated the proceedings.

ROYAL COLLEGE OF SURGEONS OF ENGLAND: EXAMINATION PAPERS.

Anatomical and Physiological Examination of Candidates for the Diploma of Member, May 5th, 1859. 1. What are the muscular agents by which the urinary bladder is evacuated? Are the actions of the muscles employed voluntary or involuntary? Further, describe the muscular coat of the bladder, and whence it derives its supply of nerves. 2. How is the boundary of the upper opening of the glottis formed? What is the unconstrained position of the epiglottis? What is the position of the epiglottis in breathing, and what in the act of deglutition? And how is the closure of the opening of the glottis effected? 3. What is meant by the "oblique bearing" of the pelvis, as seen in a well articulated skeleton? What is the consequent direction of the openings of the pelvis in the erect posture? And what is the reason assigned for the oblique position of the pelvis? 4. What are the muscles of the leg and foot which contribute to raise and sustain the body on the toes or tip-toe? 5. What are the communications between the ventricles of the brain? 6. What is the physiological explanation of sighing? 7. What are the origin and course of the spermatic artery? What is the disposition of its branches in the testicle? And, again, what are the course, disposition, and termination of the veins by which the blood is returned?

Examination on Pathology, Surgical Anatomy, and Surgery, of Candidates for the Diploma of Member, May 10th, 1859. 1. What is the progress, from the commencement to the completion, of the process of union in a simple fracture? and what are the principal causes which may retard or wholly prevent bony union? 2. What are the circumstances which, without the aid of surgery, may be effectual in arresting hæmorrhage, and in permanently closing the vessel, when a large artery has been divided? 3. What is the process of healing by granulation? What is meant by healthy granulations, in respect of their organic condition? And how is a granulating wound finally cicatrised? 4. What are the causes of varicose veins in the lower limbs? Are the deep seated veins liable to the same affection? and, if not, what is the explanation? And what is the principle of the treatment of varices of the lower extremity, exclusive of surgical operations? 5. What is the character of the pulse, in respect of its fulness, force, and frequency, in in-

flammatory fever dependent upon acute local inflammation? and, on the other hand, in hectic fever dependent upon exhausting suppuration? 6. What is the process by which extraneous bodies are encysted?

Queen's College, Birmingham. The following letter has been received by the Council of this institution from Mr. Sands Cox.

"Queen's College, Birmingham, May 7, 1859.

"My Lords and Gentlemen,—I beg leave most respectfully to resign my office as Principal of the Queen's College; and in order to prevent any difficulties as to future arrangements, I have to request you to relieve me from the office of Warneford Trustee. I received the sum of £500 in May last (1858), the first instalment from the testimonial committee, which was paid over to Mr. Barnsley, the builder, on account of the new buildings, at the same date. I hope, in accordance with your resolution of the 3rd of April, 1857, you will forthwith found a medical scholarship, and grant gratuitous admission to the Museum, once a week, to the artisans. If I may be permitted to express a wish, it would be that the scholarship (rooms rent free) should be competed for on the following conditions:—

"The scholarship to be open to all matriculated students of the Queen's College and the Queen's Hospital, at the commencement of their first winter session. The examination to be in the following subjects:—Latin and Greek classics, mathematics, English history, and the modern languages. One hundred marks in the examination to be assigned to each of the above subjects. No scholarship to be awarded to any candidate who does not obtain an aggregate at least of 250 marks. The scholarships to be held for three years, provided the scholar shall produce to the council, at the close of his first and second academical years respectively, a certificate signed by the warden, the chaplain, and the dean of the faculty, on behalf of the medical professors, of daily attendance at Divine service in the chapel, of due attendance at lectures and examinations, and of satisfactory progress in his medical studies during the year then passed. If any scholar shall fail to produce such certificate at the close of each academical year, the scholarship shall be deemed vacant. The particulars of each year's examination shall be published by the Council six months before the day appointed for the examination.

"I have the honour to remain, my Lords and Gentlemen,

"Your obedient servant, William Sands Cox.

"To the Council of the Queen's College, Birmingham."

Mortality of Children in Russia. A terrible picture of the mortality of children in Russia is given in a journal called the *Rousky Dnevnik*. It appears that a vast proportion of this premature death is assignable to the carelessness of mothers, which continually exposes children to fatal accidents. "The indifference of our peasantry", observes a writer in the journal above mentioned, "with respect to their children exceeds all belief. They give themselves not the least concern about their offspring. The consequence is, that only a very small proportion of the children brought into the world reach maturity. The mortality of children under five years of age is, no doubt, considerable in all countries, but in Russia it is frightful. Many more than one-half of the children born in this country die in the very earliest period of infancy. One-eighth die between the ages of five and ten, and another eighth between ten and twenty: thus three-fourths perish before reaching mature age. Where are we to look for the cause of this mortality? It cannot be referred to climate, for throughout the whole extent of Russia there is no climate more inimical to health than that of St. Petersburg; and yet in the capital the deaths in infancy are not, as in other parts of the empire, in the proportion of one-half, but only of one-third, to the births. The reason is, that children are more cared for, and their physical development is better attended to in St. Petersburg than in the provinces. The ignorance and superstition of the lower classes of the people have, in many instances, a most fatal influence on the management of children. Of this the following facts afford a melancholy example. Last August, small-pox of a very malignant character broke out in several villages of the government of Voronetz, and made fearful ravages among children of both sexes. The activity of the disease was considerably heightened by the humid climate, the uncleanliness of the people, the bad quality and scantiness of food, and the ignorance and negligence of mothers in the treatment of the patients. A physician, residing in one of the infected districts, found a young child suffering under a most terrible attack of small pox. He offered his professional assistance, which was obstinately rejected by the mother, who observed that, if it were written that her child must die, no doctor could save him. However, the poor woman was fondly attached to her child, and at length she yielded to the doctor's recommendations, and said, 'Well, you may try to cure him; and may God help you.' On being asked why the child had not been vaccinated, she replied that, when the men came into the village to vaccinate the children, she hid her boy; and, though the men came into her hut several times, they could not find him. Vaccination, she observed, was an impious practice, and she would not charge her conscience with the sin of making her child a victim to it. 'But,' said the doctor, 'you could have been compelled to have your child vaccinated.' The woman shook her head sorrowfully, and wept. Another woman, who happened to be present, said that she had a child; and that, if any doctor were to vaccinate it, she would suck out the matter, or even bite out the piece of flesh with her teeth, to prevent the diabolical operation taking effect. This opinion on the subject of vaccination is general among the *Ruskolniks*, or schismatics, of the district of Korotoiak; but it also prevails in districts in which there is no schism. The Russian peasantry generally look upon a doctor with distrust; and, in cases of illness, they invariably prefer the assistance of the village sorcerer." (*Bulletin.*)

Testimonial to Dr. Marcus Dill of Ballykelly. The *Londonderry Sentinel* of April 22nd, contains an address to Dr. Dill, of Ballykelly, on the occasion of a presentation to that gentleman of a handsome brougham and a purse of sovereigns. The pecuniary value of the present is about £200 in all. It is highly creditable to Dr. Dill that he occupies such a favourable position in the estimation of those among whom his labours are exercised.

German Hospital, Dalston. This institution, which has been in existence for thirteen years, was, in the first instance, opened for giving medical relief to poor Germans, but now extends its benefits to all who require its aid. It lies under the incubus of debt, to the amount of £1,500. In order to liquidate this, the directors have arranged for holding a bazaar, in St. James's Hall, on the 23rd, 24th, and 25th of June, under the patronage of her Majesty.

Lunatics. The select committee of the (late) House of Commons appointed to inquire into the operation of the Acts of Parliament and Regulations for the care and treatment of lunatics, and to whom certain lunacy and lunatic Bills were referred, made a report before the dissolution, which has appeared in the form of a bulky blue book. The committee, although they have examined many witnesses, do not consider the inquiry as altogether complete, and, under these circumstances, decline to offer any definite opinion on the questions to them referred. They hand over to the House the minutes of evidence. The witnesses examined before the select committee included the Earl of Shaftesbury, Dr. H. H. Southey, Mr. F. Barlow, Mr. Norris Wilde, Dr. J. Connolly, Dr. Sutherland, Mr. M. Milnes, M.P., Dr. C. Hood, Admiral R. Saumarez, Sir A. Y. Spearman, Mr. C. H. Cottrell, Sir G. Robinson, and Colonel Sir J. Jebb.

TO CORRESPONDENTS.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Communications have been received from:—Mr. G. M. Humphry; Mr. T. Holmes; Mr. J. A. Locking; Dr. T. Ogier Ward; Dr. E. Smith; Mr. Fleming; Mr. J. Charles Savery; Mr. T. M. Stone; Dr. Turnbull; Mr. E. Boult; Dr. P. H. Williams; Mr. W. F. Spoffforth; Mr. Augustin Prichard: Dr. Tyler Smith; Dr. B. W. Richardson; Students; Devonshire; and Dr. Althaus.